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Maximum Match 100%
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Aaf44286 Human PRO
Abx75504 Human PRO
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Abx80474 Novel human
Aca69380 Human CDN
Abx80475 CDNA enco
Abx89495 Human PRO
Aca64519 Novel huma
Abx96837 Human CDN
Aca64519 Novel human
Abx78486 DNA encod
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Abx80978 Human CDN
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TCTTGCTGTTCAACAAAAAACATATCAGGGGACAAAGCATGTAACTTGATGATCTTCGAC
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                                                                  AGAATCCTTTCGGAATCACTCCGCAGGAAACGTTACTCAAGACTGGATTATTTGATCAAT
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Query Match 100.0%; Score 2284; Best Local Similarity 100.0%; Pred. No. 0; Matches 2284; Conservative 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New human nucleic acids encoding secreted and transmembrane polypeptides which are designated as PRO polypeptides are described The membrane-bound proteins have various industrial applications, including as pharmaceutical and diagnostic agents. The membrane-bound proteins can also be employed for screening of potential peptide or small molecule inhibitors of the relevant receptor/ligand interaction. Anti-PRO antibodies are useful for the affinity purification of PRO from recombinant cell culture or natural sources
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ME, Goddard A, Godowski PJ, Grimaldi CJ, Gu
, Kljavin IJ, Napier MA, Roy MA, Tumas D, w
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X AAF44268 standard; cDNA; 2284

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Human PRO361 nucleotide sequence SEQ ID NO:514. 02-APR-2001 (first entry)

Human; secreted and transmembrane protein; PRO; cytostatic; cell death; cancer; chromosomal mapping; gene mapping; tissue typing; diagnostic assay; ss.

Homo sapiens.

WO200073454-A1

07-DEC-2000

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26-JUL-1999;
28-JUL-1999;
17-AUG-1999;
17-SEP-1999;
15-SEP-1999;
08-CCT-1999;
08-CCT-1999;
01-DEC-1999;
01-DE
                                                                                                                                                                                                                                                            The present invention describes human secreted and transmembrane PRO proteins. The PRO proteins have cytostatic activity. The PRO proteins can be used for targeted delivery of bioactive molecules, such as toxins, radiolabels or antibodies, that cause cell death. PRO nucleotide sequences, and their fragments, can be used as hybridisation probes, in chromosomal and gene mapping, and in the generation of anti-sense RNA and DNA. They may also be used to produce transgenic animals which are used to develop and screen therapeutically useful reagents. The PRO nucleotide and protein sequence can be used for tissue typing and in treating cancer. Anti-PRO antibodies can be used in diagnostic assays. AAF44270 to AAF44470 represent PCR primers and hybridisation probes used in the isolation of human PRO sequences. AAF444087 to AAF44269 and AAB65154 to AAB65300 represent human PRO polymucleotide and protein sequences given in the exemplification of the present invention
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Ferrara N, Fong S, Gerber H, Gerritsen ME, Goddard A,
Grimaldi CJ, Gurney AL, Kljavin IJ, Napier MA, Pan J,
Roy MA, Stewart TA, Tumas D, Watanabe CK, Williams PM,
                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 2;
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11-EBB-2000;
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22-MAR-2000;
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Gerritsen I Hillan KJ, New isolated PRO polypeptide and encoding nucleic acid, useful for the diagnosis and treatment of disorders associated with the PRO polypeptide, such as AIDS, cancer, atherosclerosis, inflammatory disease and diabetes. 2003-174141/17. ABU55934. Botstein D, Eaton DL, Ferrara N, Filvaroff ME, Goddard A, Godowski PJ, Grimaldi JC, Gu , Kljavin IJ, Napier MA, Roy MA, Tumas D, W Gurney AL; Wood WI;

Claim

2; Fig 31; 178pp; English.

The invention relates to an isolated PRO polypeptide (a secreted or transmembrane protein) comprising: (a) at least 80% sequence identity or positives when compared to any of 15 sequences, fully defined in the specification, lacking or with its associated signal peptide; or (b) at least 80% sequence identity to a sequence encoded by the full-length coding sequence of a DNA deposited in the American Type Culture Collection (ATCC). Also included are: (1) an isolated nucleic acid comprising: (a) at least 80% sequence identity to a nucleotide sequence or full-length coding sequence with any of 15 full defined sequences of 957-3441 base pairs, given in the specification; or (c) at least 80% sequence identity to a full-length coding sequence of a

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                                                                   TTTTCACAAGCAGTCACTCCCCTAGCCCATCATCACACAGATTATTCAAAGCCCACCGAT
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                        ATCTCATGGAGAGACACACTTTCTCAGAAGTTTGGATCCTCAGATCACCTGGAGAAACTA
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97US-0065186P.
97US-0066770P.
98US-0075945P.
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                                                    TTAAAACTTATTCCAGATGTAGTTCCTTCCAATTAAATATTTGAATAAATCTTTTGTTAC
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standard; DNA; (first entry) 2284

Human; PRO; hypertrophy of neonatal heart; angiogenesis; wound healing; cardiac insufficiency disorder; cancer; tumour; immune response; adrenal cortical capillary endothelial growth; c-fos induction; vascular endothelial growth factor inhibition; VEGF inhibition; endothelial cell growth inhibitor; T-lymphocytes stimulation; retinal neurons cell survival; rod photoreceptor cell survival; retinal disorder; retinitis pigmentosum; kidney disorder; mammalian kidney mesangial cell proliferation; Berger disease; dermatitis; herpetiformis; Crohn's disease; chondrocyte proliferation; chondrocyte redifferentiation; sports injury; arthritis; gene; ds.

3-0062250P. --US020069. 3-0065311P. 3-0065311P. 3-0066770P. 3-0075945P. 3-0078910P. 3-0083322P. 3-0083322P.

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Complypeptides are useful in detecting PRO polypeptide. The PRO Complypeptides are useful in detecting PRO polypeptides in a sample, in Completion and the control of the c
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P-PSDB; ABU59193.
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Stewart
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, Fong S, Gerber H, Gerriteen ME, Goddard A,
JC, Gurney AL, Kljavin IJ, Napier MA, Pan J,
Stewart TA, Tumas D, Watanabe CK, Williams PM,
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2221 TIAAACTTATTCCAGATGTAGTTCCTTCCAATTAAATATTTGAATAATCTTTTGTTAC	B 8	141 ACCTTTCAGGCACCTACGGACTCGAAAGGCAGCTTAGAAACCCATACCGTTTACAGAAATC 12	\$ 8
2161 TAAAATCAACTGTTTATATCAATTTCTAATGGATTTGCTTTTCTTTTATATGGATTCCT	B 8	1 GTTTTTACACGGGCTGCGGCTACACTCCAAGCAATGGCTACAACAGCAGTTCTGACTACC 	B &
	B 8	1021 ACCACAGCTCCACCTGTAACCACTGTCACCTCTCAGCCTCCCACGACCCTCATTTCTACA 1080	B 8
	D Q	961 ACCCTTCTACCCACCAATGCTTCAGTGACACCTTCTGGGACTTCCCAGCCACAGCTGGCC 1020	B 8
1981 AGTGGGAACCAAATTAGGTAATTTTGGGTAATCTTGTCTCTAAAATATTAGCTAAAAACAA	, B &	901 CTCCCAGCTACGGTGGCAGTTGCTTCTCCACATACCACCTCGGCTACTCCAAAGCCCGCC 960	용 성
921	B &	841 AGTTCACAATTTTCCTCTGATCAAGAAATAGCTCATCTGCTGCAGAAATGTGAGTGCG 900	용 성
861	, B &	781 TITAAGATGGATGAAGCAAGTGCCCAGCTCCTTGCTTATAAGGAAAAAGGCCATTCTCAG 840	유 성
801	}	721 ATCTCATGGAGAGACACACTTTCTCAGAAGTTTGGATCCTCAGATCACCTGGAGAAACTA 780	용 성
	}	661 TTTTCACAAGCAGTCACTCCCCTAGCCCATCATCACACAGATTATTCAAAGCCCACCGAT 720	유 성
	Db Qy	601 TTGACCAGAAATTTGCCAAGCCAAGAGTTACCCCAGGAAGATTCTCTCTTACATGGCCAA 660	B 8
	B &	1 TGTCCATTGAAACCAGCAAAAGGACTTATGAGTTACAGGATAATTACAGATTTTCCATCT	용 성
	ති රි	481 ACTCGAAAAACAGCTAGACAACCCAACTGCTACCTATTTTTCTGTCCCAACGAGGAAGCC 540	B 8
501	g	421 TCTTGCTGTTCAACAAAAAACATATCAGGGGACAAAGCATGTAACTTGATGATCTTCGAC 480	B 8
4 4 6	B 8	361 TCTAAGGGAATCAGAGGCAATGAGCCCGTATATACTTCAACTCAAGAAGACTGCATTAAT 420	유 성
381	S B 8	01 AGTCAGAATTGCCTCAAAAAAGAGTCTAGAAGATGTTGTCATTGACATCCAGTCATCTCTT 3	B 8
1321 AGTTCCTCCCAGGGCAGTGTTCCAGAAAATCAGTACGGCCTTCCATTTGAAAAATGGCTT	g Q	41 GAAGGAGCTTGACTTACACTTTGGTAATAATTTGCTTCCTGACACTAAGGCTGTCTGCT 30	음 성
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Query Match Best Local Similarity 100.0%; Score 2284; DB 7; Length 2284; Best Local Similarity 100.0%; Pred. No. 0; Matches 2284; Conservative 0; Mismatches 0; Indels 0; Gaps 0; Qy 1 GCGGAGCATCCGCTGGGGTCCTCGCCGAGACCCCCGGGGATTCGCCGGTCCTTCCCGC 60	15-SEP-199; 99W 08-OCT-1999; 99W 01-DEC-1999; 99W 01-DEC-1999; 99W 01-DEC-1999; 99W 16-DEC-1999; 99W 16-DEC-1999; 99W 16-DEC-1999; 99W 20-DEC-1999; 99W 06-JAN-2000; 2000W 11-FEB-2000; 2000W 11-FEB-2000; 2000W 24-FEB-2000; 2000W 24-FEB-2000; 2000W 24-FEB-2000; 2000W 16-MAR-2000; 2000W 17-MAR-2000; 2000W 17-MAR-2000; 2000W 19-MAR-2000; 2000W	PR 24-AUG-1998; 98US-0097952P. PR 26-AUG-1998; 98US-0097952P. PR 26-AUG-1998; 98US-0097952P. PR 26-AUG-1998; 98US-0097952P. PR 26-AUG-1998; 98US-0097974P. PR 26-AUG-1998; 98US-0097979P. PR 26-AUG-1998; 98US-0097979P. PR 26-AUG-1998; 98US-0098512P. PR 31-AUG-1998; 98US-0008523P. PR 16-SEP-1998; 98US-0100654P. PR 17-SEP-1998; 98US-0100654P. PR 17-SEP-1998; 98US-0100654P. PR 17-SEP-1998; 98US-0100654P. PR 17-SEP-1998; 98US-0110654P. PR 01-DEC-1998; 98US-0110654P. PR 02-DEC-1998; 98US-0110656. PR 08-MAR-1999; 99US-0113296P. PR 02-JUN-1999; 99US-014304P. PR 23-JUN-1999; 99US-014304P. PR 26-JUL-1999; 99US-0144569BP. PR 26-JUL-1999; 99US-014569BP. PR 17-AUG-1999; 99US-014569BP.
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The invention discloses isolated PRO secreted/transmembrane polypeptides CC comprising a sequence without signal peptide and the nucleic acid ce encoding them. The polypeptides can be used to raise antibodies that CC encoding them. The polypeptides can be used to raise antibodies that CC encoding them. The PRO polypeptide, for linking a bioactive specifically bind to the PRO polypeptide, for linking a bioactive conclude to a cell expressing a PRO protein and for modulating at least CC encoded to a cell expressing a PRO protein and for modulating at least CC polynuclectides are also useful in gene therapy, in chromosome CC identification, as chromosome markers, or in generating probes. The PRO polypeptides are useful as molecular markers for protein electrophoresis, CC and the isolated nucleic acids may be used for recombinantly expressing CC those markers. The PRO polypeptides and nucleic acids may also be used in CC tissue typing. Anti-PRO antibodies are useful in diagnostic assays for CC and the affinity purification of PRO from recombinant cell culture or natural sources. The sequences presented in ABX90083-ABX90468 are the PRO genes encoding, the primers amplifying and the probes detecting the PRO
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05-JAN-1999
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Grimaldi
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DB; ABU60623.
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Gerber H, Gerritsen ME, Goddard
AL, Kljavin IJ, Napier MA, Pan
Tumas D, Watanabe CK, Williams
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Gerber H, Gerritsen ME, Goddard
AL, Kljavin IJ, Napier MA, Pan
Tumas D, Watanabe CK, Williams
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                  541 TGTCCATTGAAACCAGCAAAAGGACTTATGAGTTACAGGATAATTACAGATTTTCCATCT
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Novel secreted and transmembrane polypeptide for modulating biological activity of cell expressing the polypeptide, identifying agonists or antagonists of polypeptide, and as molecular weight markers. P-PSDB; ABU14005.

2; Fig 327; 649pp; English.

The present invention relates to the isolation of novel human PRO CC polypeptides, and the polynucleotide sequences encoding them. The PRO CC polypeptides are secreted and transmembrane proteins. The PRO CC polypeptides are useful for detecting other PRO polypeptides, for linking thousand the properties of cells expressing PRO polypeptides, and for for CC bioactive molecules to cells expressing PRO polypeptides, and for for CC chonogical activities of cells expressing PRO polypeptides, and for for CC chromosome and gene mapping, in the generation probes, in CC chromosome and gene mapping, in the generation of antisense RNA and DNA, in the preparation of PRO polypeptides, for generating transgenic animals of CC or knockout animals, to construct hybridisation probes for mapping the gene which encodes the PRO polypeptides, for generating transgenic animals of CC identification, as chromosome markers, in gene therapy, for chromosome CC identification, as chromosome markers, and for generating probes for PCR, CC Northern analysis, Southern analysis and Western analysis. The present CC sequence encodes a human PRO polypeptide of the invention. Note: The CC sequence data for this patent was obtained in electronic format directly from the USPTO web site at seqdata.uspto.gov/psipsDIDEntry.html

C; 464 <u>ი</u> 632 T; 0 U; 0 Other;

Query Match	100.0%; Score
Matches	4; Conserval
₽ ₽	1 GCGGAGCATCCGCTGCGGTCCTCGCCGAGACCCCCGCGCGGATTCGCCGGTCCTTCCCCGC 60
Вb	1 GCGGAGCATCCGCTGCGCTGCCGAGACCCCCGCGCGGATTCGCCGGTCCTTCCCGC 60
Ş	61 GGGCGCGACAGAGCTGTCCTCGCACCTGGATGGCAGCAGGGGGCCCGGGGTCCTCTCGAC 120
Вb	61 GGGCGCGACAGAGCTGCCTCGCACCTGGATGGCAGCAGGGGCGCCGGGGTCCTCTCGAC 120
φ	121 GCCAGAGAGAATCTCATCATCTGTGCAGCCTTCTTAAAGCAAACTAAGACCAGAGGGAG 180
рь	121 GCCAGAGAGAAATCTCATCATCTGTGCAGCCTTCTTAAAGCAAACTAAGACCAGAGGGAG 180
Ş	181 GATTATCCTTGACCTTTGAAGACCAAAACTAAACTGAAATTTAAAATGTTCTTCGGGGGA 240
Вb	181 GATTATCCTTGACCTTTGAAGACCAAAACTAAACTGAAATTTAAAAATGTTCTTCGGGGGA 240
δ	241 GAAGGGAGCTTGACTTTACACTTTGGTAATAATTTGCTTCCTGACACTAAGGCTGTCTGCT 300
Db	241 GAAGGGAGCTTGACACTTTGGTAATAATTTGCTTCCTGACACTAAGGCTGTCTGCT 300
Ş	301 AGTCAGAATTGCCTCAAAAAGGTCTAGAAGATGTTGTCATTGACATCCAGTCATCTCTT 360
Db	301 AGTCAGAATTGCCTCAAAAAGAGTCTAGAAGATGTTGTCATTGACATCCAGTCATCTCTT 360
δ	361 TCTAAGGGAATCAGAGGCAATGAGCCCGTATATACTTCAACTCAAGAAGACTGCATTAAT 420
Db	361 TCTAAGGGAATCAGAGGCAATGAGCCCGTATATACTTCAACTCAAGAAGACTGCATTAAT 420
Qy	421 TCTTGCTGTTCAACAAAAAACATATCAGGGGACAAAGCATGTAACTTGATGATCTTCGAC 480
Db	421 TCTTGCTGTTCAACAAAAAACATATCAGGGGACAAAGCATGTAACTTGATGATCTTCGAC 480
Ş	481 ACTCGAAAAACAGCTAGACAACCCAACTGCTACCTATTTTTCTGTCCCAACGAGGAAGCC 540
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                                                AGCTCTATGTAAAGTAAAAGTATAATTGCCATATAAATTCAAAATTCAACTGGCTTT
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Human; PRO; gene; ss; secreted polypeptide; transmembrane polypeptide; cancer; inflammatory disease; atherosclerosis; cardiac injury; AIDS; infertility; birth defect; premature aging; diabetes; dog; cat; horse; acquired immunodeficiency syndrome; cow; sheep; pig; goat; rabbit; industry; cytostatic; antiinflammatory; cardiant; antiinfertility; antiarteriosclerotic; antidiabetic. 2001US-00945015 97US-0067411P. 97US-0069278P. 97US-0069334P. 97US-0069335P.

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Gerritsen N
Hillan KJ,
                                                                                                                                   The invention relates to a human secreted and transmembrane polypeptide (PRO) and the polymcleotide encoding it. The PRO polypeptide or polymcleotide is useful in pharmaceuticals, diagnostics, biosensors or bioreactors. These are particularly useful for detecting or treating cancers, inflammatory diseases, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, acquired immunodeficiency syndrome (AIDS) and diabetic complications in mammals, e.g. humans, dogs cats, cattle, horses, sheep, pigs, goats or rabbits. The sequences are also useful in biotechnological and medical research and in various industrial applications. This sequence represents a human PRO polynucleotide of the invention
                                                                                                                                                                                                                                                                                                                 New secreted and transmembrane polypeptides (e.g. PRO241, for use in pharmaceuticals, diagnostics or bioreactors, particularly for detecting or treating e.g. cancers, infertility or acquired immunodeficiency syndrome in mammals.
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Human; secreted and transmembrane protein; cytostatic; anti-HIV; virucide; hepatotropic; antiinflammatory; neuroprotective; gene therapy; pRO; pharmaceutical; diagnostic; biosensor; bioreactor; malignancy; cancer; ovarian cancer; colorectal cancer; Kaposi's sarcoma; leukaemia; lymphoma; hepatitis B; multiple sclerosis; Crohn's disease;
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                                                                                                       New genes and secreted and transmembrane polypeptides (e.g. PRO183 or PRO184), useful for treating or diagnosing e.g. ovarian cancer, Kaposi's sarcoma, leukemia, lymphoma, hepatitis B, multiple sclerosis or Crohn's
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Ferrara N, Fong S, Gerber H, Gerritsen ME, Goddard A,
Grimaldi JC, Gurney AL, Kljavin IJ, Napier MA, Pan J,
Roy MA, Stewart TA, Tumas D, Watanabe CK, Williams PM,
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ATCTCATGGAGAGACACACTTTCTCAGAAGTTTGGATCCTCAGATCACCTGGAGAAACTA
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CC Type Culture Collection (e.g. ATCC Deposit No. 209621, 552-PTA, 819-PTA, CC 209439, 203135, etc); or a sequence with at least 80% identity to a DNA CC encoding a PRO polypeptide. The PRO polypeptides or polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or bioreactors. These CC cancers (e.g. ovarian cancer, colorectal cancer, Kaposi's sarcoma, CC clukaemia or lymphoma), hepatitis B, multiple sclerosis, or Crohn's CC disease in mammals. The PRO polypeptides are useful in drug screening, CC particularly as targets for therapputic intervention in these diseases, CC and in the diagnostic determination of the presence of these diseases. CC The PRO polypeptides are also useful as molecular weight markers, or for chromosome identification. The PRO genes are useful as hybridisation CC probes, or for screening libraries of human cDNA, genomic DNA or mRNA. CT from Genes may also be used in gene therapy, particularly for creplacing a defective gene. This sequence encodes a novel human secreted and transmembrane PRO polypeptides.

Seguence 2284 BP; 612 A; 576 C; 464 1 GCGGAGCATCCGCTGCGGTCCTCGCCGAGACCCCCGCGCGGATTCGCCGGTCCTTCCCGC GGGCGCACAGAGCTGTCCTCGCACCTGGATGGCAGCAGGGGCGCCGGGGTCCTCTCGAC GAAGGGAGCTTGACTTACACTTTGGTAATAATTTGCTTCCTGACACTAAGGCTGTCTGCT GATTATCCTTGACCTTTGAAGACCAAAACTAAACTGAAATTTAAAATGTTCTTCGGGGGA GATTATCCTTGACCTTTGAAGACCAAAACTAAACTGAAATTTAAAATGTTCTTCGGGGGA GCCAGAGAGAAATCTCATCATCTGTGCAGCCTTCTTAAAGCAAACTAAGACCAGAGGGAG TTTTCACAAGCAGTCACTCCCCTAGCCCATCATCACACAGATTATTCAAAGCCCCACCGAT TTGACCAGAAATTTGCCAAGCCAAGAGTTACCCCAGGAAGATTCTCTCTTACATGGCCAA TTGACCAGAAATTTGCCAAGCCAAGAGTTACCCCAGGAAGATTCTCTCTTACATGGCCAA TGTCCATTGAAACCAGCAAAAGGACTTATGAGTTACAGGATAATTACAGATTTTCCATCT TGTCCATTGAAACCAGCAAAAGGACTTATGAGTTACAGGATAATTACAGATTTTCCATCT TCTTGCTGTTCAACAAAAACCATATCAGGGGACAAAGCATGTAACTTGATGATCTTCGAC TCTTGCTGTTCAACAAAAAACATATCAGGGGACAAAGCATGTAACTTGATGATCTTCGAC AGTCAGAATTGCCTCAAAAAGAGTCTAGAAGATGTTGTCATTGACATCCAGTCATCTCTT AGTCAGAATTGCCTCAAAAAGAGTCTAGAAGATGTTGTCATTGACATCCAGTCATCTCTT GAAGGGAGCTTGACTTACACTTTGGTAATAATTTGCTTCCTGACACTAAGGCTGTCTGCT GCCAGAGAGAAATCTCATCATCTGTGCAGCCTTCTTAAAGCAAACTAAGACCAGAGGGAG TTTTCACAAGCAGTCACTCCCCTAGCCCATCATCACACAGATTATTCAAAGCCCACCGAT 100.0%; illarity 100.0%; Conservative 0; 0 Score 2284; Pred. No. 0; Mismatches ဂ္ 632 .. DB **,** 7; 0 0 U; 0 Other; Length 2284; Indels <u>,</u> Gaps 660 600 360 240 180 60 720 660 600 540 540 480 480 420 420 360 300 300 180 120 120

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Cornelia de Lange syndrome; gene therapy; immune disorder;
inflammatory disease; organ failure; atherosclerosis; cardiac injury;
infertility; birth defect; premature aging; cardiac injury; AIDS; cancer;
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                                                                                                                                                                               CC transmembrane polypeptide (designated as PRO proteins). 15 PRO CC polypeptides and their encoding polynucleotides are disclosed. Also CC included are a vector comprising the PRO nucleic acid, a host cell comprising the vector, a process for producing a PRO polypeptide (by CC culturing the host cell under conditions for the expression of the PRO CC polypeptide, and recovering the PRO polypeptide from the cell culture, an isolated polypeptide having at least 80% amino acid sequence identity to CC the PRO polypeptides, a chimaeric molecule comprising PRO fused to a CC the PRO polypeptides, a chimaeric molecule comprising PRO fused to a CC the PRO polypeptides, a chimaeric molecule comprising PRO fused to a CC in chromosome and gene mapping, in generating sense and antisense RNA or CC in chromosome and gene mapping, in generating sense and antisense RNA or CC in chromosome and serveening of therapeutically useful reagents, and in cromosome and serveening of therapeutically useful reagents, and in CC gene therapy. The polypeptides may be used as molecular weight markers CC exids may also be used for chromosome identification, and tissue typing. PRO241 (identified as Chordin) is a candidate gene for Cornelia de Lange CC syndrome. Other PRO proteins are variously implicated in immune CC disorders, inflammatory disease, organ failure, atherosclerosis, cardiac CRRO proteins are variously implicated in immune CC AIDS, cancer and diabetic complications. The present sequence encodes a CC CR porotein
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Botstein D, Eaton DL, Ferrara N, Filvaroff E;
ME, Goddard A, Godowski PJ, Grimaldi JC, Gurn
, Kljavin IJ, Napier MA, Roy MA, Tumas D, Woo
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Best Local Similarity
Matches 2284; Conserv
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                                      GTTCAAGCGATTCTCCTGCCTCAGCCTCCTAAGTATCTGGGATTACAGGCATGTGCCACC
                                                  GTTCAAGCGATTCTCCTGCCTCAGCCTCCTAAGTATCTGGGATTACAGGCATGTGCCACC
                                                                                      TTGCCCAGGCTGGAGTGCAGTAGCACGATCTCGGCTCTCACCGCAACCTCCGTCTCCTGG
                                                                                                     TTGCCCAGGCTGGAGTGCAGTAGCACGATCTCCGGCTCTCACCGCAACCTCCGTCTCCTGG
                                                                                                                                                      AGACAGGAAAATGCCCCCTTCTGCTTTTCCTTTTTTTTTGGAGACAGAGTCTTGCTCTG
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22-UUN-1999;
15-SEP-1999;
30-NOV-1999;
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16-DEC-1999;
11-FEB-2000;
22-FEB-2000;
30-MAR-2000;
30-MAR-2000;
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98WO-US025108.
99WO-US01252.
99WO-US02109.
99WO-US028313.
99WO-US028301.
99WO-US028301.
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2000WO-US03565.
2000WO-US003565.
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Best Local Similarity
Matches 2284; Conserv
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01-DEC-2000;
28-FEB-2001;
25-MAY-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    invention may have antiinflammatory, antiarteriosclerotic, cardiant, anti-
infertility, anti-HIV, cytostatic and antidiabetic activities and may be
used in gene therapy. The nucleic acids and polypeptides are useful for
treating inflammatory diseases, organ failure, atherosclerosis, cardiac
injury, infertility, birth defects, premature aging, AIDS, cancer, or
diabetic complications. The nucleic acids are useful as hybridisation
probes, in chromosome and gene mapping, and in generating antisense RNA
or DNA. The polypeptides are useful as pharmaceuticals, diagnostics,
biosensors or bioreaccors. Both are useful in tissue typing. The present
sequence represents a nucleic acid sequence of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New secreted and transmembrane nucleic acids and polypeptides, designated as PRO, useful for treating inflammation, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, AIDS, or
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This invention relates to a nucleotide sequence encoding an isolated secreted and/or transmembrane protein. The nucleotide sequences of t
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                       TCTTGCTGTTCAACAAAAAACATATCAGGGGACAAAGCATGTAACTTGATGTTCGAC
                                                                                            TCTAAGGGAATCAGAGGCAATGAGCCCGTATATACTTCAACTCAAGAAGACTGCATTAAT
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E, Goddard
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; 2001WO-US006520.
; 2001US-00866028.
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100.0%; Pred. No. 0;
tive 0; Mismatches
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A, Godowski PJ, Grimaldi JC, Gurney AL;
Napier MA, Roy MA, Tumas D, Wood WI;
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1 GCGGAGCATCCGCTGCGGTCCTCCCCGAGACCCCCGGCGGATTCGCCGGTCCTTCCCGC	20-JUL-1999; 99US-0144758P. 28-JUL-1999; 99US-0145998P. 28-JUL-1999; 99US-014522P. 21-NAG-1999; 99US-014522P. 21-NAG-1999; 99US-014522P. 21-NAG-1999; 99US-015863P. 21-NAG-1999; 99US-015863P. 21-NAG-1999; 99US-015863P. 21-NAG-1999; 99US-015863P. 21-NAG-1999; 99US-015863P. 21-NAG-1999; 99US-015863P. 21-NAG-1999; 99WO-US02281. 21-NAG-1999; 99WO-US02281. 21-NAG-1999; 99WO-US023865. 21-PEB-2000; 2000WO-US003414. 21-PEB-2000; 2000WO-US003414. 21-PEB-2000; 2000WO-US005841. 21-PEB-2000; 2000WO-US005841. 21-NAG-2000; 2000WO-US0058841. 21-NAG-2000; 2000WO-US006884. 21-NAG-2000; 2000WO-US006884. 21-NAG-2000; 2000WO-US006884. 21-NAG-2000; 2000WO-US006884. 21-NAG-2000; 2000WO-US01335B. 21-NAG-2000; 2000WO-US0135B. 21-NAG-2000; 2000WO-US0135B. 21-NAG-2000; 2000WO-US0135B. 21-NAG-2000; 2000WO-US0135B. 21-NAG-2000; 2000WO-US0135B. 21-NAG-2000; 2000WO-US013941. 23-NUG-2000; 2000WO-US013941. 23-NUG-2000; 2000WO-US013941. 23-NUG-2000; 2000WO-US013941. 23-NUG-2000; 2000WO-US02332B. 24-NUG-2000; 2000WO-US02332B. 24-NUG-2000; 2000WO-US02332B. 25-NAG-2000; 2000WO-US02333B. 25-NAG-2000; 2000WO-US02333B. 25-NAG-2000; 2000WO-US02333B. 25-NAG-2000; 2000WO-US02333B. 25-NAG-2000; 2000WO-US02333B. 25-NAG-2000WO-US0233B. 25-NAG-2000WO-US0233B. 25-
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	481 ACTCGAAAAACAGCTAGACAACGCCAACTGCTACTATTTTTCTGTCCCAACGAGGAAAAAACGCC 540 541 TGTCCATTGAAACCAGCAAAAGGACTTATGAGTTACAGATTATCAGAATTTTCCATTCCATC 601 TGACCAGAAATTTGCCAAGCCAAAAGGACTTATGAGTTACAGGATAATTACAGATTTTCCATCT 600 601 TGACCAGAAATTTGCCAAGCCAAGAGTTACCCCAGGAAGATTCTCTCTTACATGGCCAA 660 601 TGACCAGAAATTTGCCAAGCCAAGAGTTACCCCAGGAAGATTCTCTCTTACATGGCCAA 660 601 TGACCAGAAATTTGCCAAGCCAAGAGTTACCCCAGGAAGATTCTCTCTTACATGGCCAA 660 601 TTTCCACAGCAGCATCACTCCCCTAGGCCATCATCACACAGATTATTCAAAGCCCACCGAT 720 601 TTTCCACAAGCAAGCACACCTTTCTCAGAAGATTACCCCAGGATTATTCAAAGCCCACCGAT 720 601 TTTCCACAAGCAAGCACACTTTCTCAGAAAGTTTGCACACAGATTATTCAAAGCCCACCGAT 720 601 TTTCCACAAGCACACACTTTCTCAGAAAGTTTGGATCCCCAGGATCACCCGAT 720 721 ATCTCATGGAGAAACACACCTTTCTCAGAAAGTTTGGATCCCCAGATTATTCAAAGCCCACCGAT 720 722 ATCTCAGAGGAGAACACACCTTTCTCAGAAAGTTTGGATCCCAGATCACCCTGGAGAAACTA 780 723 ATCTCATGGAGAAACACACCTTTCTCAGAAAGTTTTGGATCCCAGATTATTCAAAGCCCAACCGAT 720 724 ATCTCAGAGTGAAACAACCACCTTCTCAGAAATTTTGGATCCCTGGAAAAAAGGCCCATTCTCAG 725 ATCTCAGAATTTTCCTCTGATCAAGAAATACTTCTTGTTGTTGATAGGAAAAAAGGCCCATTCTCAG 840 840 ATTTAAGATTGATTCCTCTGATCAAGAAATACCTCATTCTCTTGCTTG

Search completed: September 25, 2004, 10:16:48 Job time : 1038 secs

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Number of Number of Number of <u>00</u>0 **SHODEROES** ΨO 2528BX Query sequence being compared:US-09-944-929-82 Number of sequences searched: Number of scores above cutoff: 10 The scores below are sorted by initial score. Significance is calculated based on initial score Gap penalty Gap size per Similarity matrix Mismatch penalty Results file 944929_x_select.res made by spaula on Thu 30 Sep 104 7:56:24-PST. FastDB - Fast Pairwise Comparison of Sequences Release 5.4 Times: Scores: Randomization group Cutoff score 100% identical sequences to the query sequence were found: 10size penalty ų Results of the initial comparison of US-09-944-929-82 (1-2284) with: File : vogel-rge.seq IntelliGenetics residues: sequences searched:
scores above cutoff: 254 00:00:00.01 Unitary Mean 2112 1.00 PARAMETERS SEARCH STATISTICS 1015 | 1269 | 1523 -3 -2 K-tuple Joining penalty Window size Median 2285 Total Elapsed 00:00:01.00 Standard Deviation 312.97 (1-2284) 30 500 2284

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10. ABX64297.SEQ cDNA encoding human PRO361 po	ABX75504.SEQ Human secreted/transmembrane		. ABX78486.SEQ DNA encoding Novel human secr	ABX80474.SEQ Novel human secreted or trans	ABX80978.SEQ Human secreted/transmembrane		ABX96832.SEQ Human cDNA encoding secreted/		tr 7 1. ACA69380.SEQ Human cDNA encoding secreted/
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0	0	0	0	0	0	0	0	0	0

A 100% similar sequence to the query sequence was found:

11. AAC58593.	Sequence Name
SEQ Human PRO361	Description
11. AAC58593.SEQ Human PRO361 protein UNQ316 e 2418 2284 2284 0.55 0	equence Name Description Length Score Score Sig. Frame
2418	Init. Opt. Length Score Score Sig. Frame
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The list of other best scores 18:

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Frame

US-09-944-929-82 (1-2284) ACA69380.SEQ Human cDNA e

cDNA encoding secreted/transmembrane protein

from: 1

to: 2284

TOIG of: aca69380 check: 5044

ACA69380 standard; cDNA; 2284 BP.

ACA69380;

26-JUN-2003 (first entry)

Human cDNA encoding secreted/transmembrane protein PRO361

Human; ss; gene; PRO; secreted protein; transmembrane protein; cardiac insufficiency disorders; angiogenesis; wound healing; cancerous tumour; immune response; retinal disorder; sight loss; retinitis pigmentosum; age-related macular degeneration; AMD; kidney disorder; Berger disease; nephropathy; dermatitis; herpet. Crohn's disease; Berger disease; nephropathy; dermatitis; herpetiformis; sports injury; arthritis.

Homo sapiens

US2003032023-A1

13-FEB-2003.

14-NOV-2001;

2001US-00990711

97US-0049787P. 97US-0062250P.

16-JUN-1997 17-OCT-1997 05-NOV-1997 12-NOV-1997 13-NOV-1997 24-NOV-1997 25-FEB-1998 20-MAR-1998 20-MAR-1998 20-MAY-1998 02-JUN-1998 02-JUN-1998 02-JUN-1998 03-JUN-1998 97US-0065311P 97US-0066770P 98US-0075945P 98US-0078910P 98US-0083322P 98US-0087106P 98US-008760PP 98US-008760PP 98US-0087769P 98US-0087759P 98US-0087827P 97US-0065186P

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30-MAY-2000;

23-JUN-2000;

23-JUN-2000;

24-AUG-2000;

27-AUG-2000;

28-EB-2001;

28-EB-2001;

29-JUN-2001;

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2000WO-US00504

2000WO-US00506319

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2000WO-US0233287

2000WO-US036520

2001WO-US006520

2001WO-US01666

2001WO-US011666

2001WO-US021736
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(GETH _ GENENTECH INC.

Grimaldi JC, Roy MA, Ste z Stewart Ł Fong ong S, Gerber Gurney AL, Kl Wart TA, Tumas Baker Gerber Botstein D, Desnoyers L, Ea er H, Gerritsen ME, Goddard Kljavin IJ, Napier MA, Pan nas D, Watanabe CK, Williams Eaton PM, Paoni Wood Godowski WI; PJ;

P-PSDB; 2003-331911/31. DB; ABU82704.

New isolated PRO polypeptides e.g., PRO826, PRO1068, PRO1184, PRO1346 PRO1375, which stimulate proliferation of stimulated T-lymphocytes and are therapeutically useful for enhancing an immune response.

Claim 2: Fig 327; 653pp; English

CC Identity to: (i) one of 147 polypeptide sequences, given in the compensation; or (ii) The polypeptide sequences, given in the compensation; or (ii) The polypeptide lacking its associated signal compensation; or (ii) The polypeptide lacking its associated signal compensation; or propertide with or compensation; or propertide and are an isolated compensation; or propertide sequence encoding propertide. The properties of one compensation and propertide signal peptide. Also included are an isolated compensation; or propertide supports or propertide compensation; or propertide with a compensation; or propertide compensation; or propertide with a compensation; or propertide compensati wound healing and cancerous tumours, PRO812 (vascular endotnessas years) reactor (VEGF) inhibitor used to inhibit tumour growth), factor (VEGF) inhibitor used to inhibit tumour growth), PRO826/PRO1168/PRO1346/PRO1375 (stimulate proliferation of stimulated T-lymphocytes and are used to enhancing immune response), PRO828/PRO826/PRO1068/PRO1132(retinal disorders e.g. sight loss in mammals due to retinitis pigmentosum and age-related macular degeners

Residue Initial ននិនិនិនិនិនិ ACA69380 Length: 2284 September 29, 370 410 420 TCTAAGGGAATCAGAGCCCGTATATACTTCAACTCAAGAAGACTGCATTAATTCTTGCTGTTCA 510 520 530 540 550 550 570 ACTION TO THE STATE OF STATE 80 90 100 110 120 130 130 GCTGTCCTCGCACCCGGAGAGAAATCTCATCATCTG AGGATAATTACAGATTTTCCATCTTTGACCAGAAATTTGCCAAGCCAAGAGTTACCCCAGGAAGATTCTCTC AGGATAATTACAGATT' AACTGCTACCTATTTTTCTGTCCCAACGAGGAAGCCTGTCCATTGAAACCAGCAAAAGGACTTATGAGTTAC
510 520 530 540 550 560 AGGCTGTCTGCTAGTCAGAATTGCCTCAAAAAGAGTCTAGAAGATGTTGTCATTGACATCCAGTCATCTCTT <u>AAATTTAAAATGTTCTTCGGGGGAGAAGGGAGCTTGACTTTACACTTTGGTAATAATTTGCTTCCTGACACTA</u> TGCAGCCTTCTTAAAGCAAACTAAGACCAGAGGGAGGATTATCCTTGACCTTTGAAGACCAAAAACTAAACTG TGCAGCCTTCTTAAAGCAAACTAAGACCAGAGGGAGGATTATCCTTGACCTTTGAAGACCAAAACTAAACTG GCTGTCCTCGCACCTGGATGGCAGGGGGGCGCGGGGTCCTCTCGACGCCAGAGAGAAATCTCATCTG (AMD)), PRO536/PRO943/PRO828/PRO826/PRO1068/PRO1132 (retinitis pigmentosum, and AMD), PRO535/PRO826/PRO819/PRO1126/PRO1360/ PRO1387 (angiogenesis e.g. wound healing and cancerous tumours), PRO819/PRO813/PRO11066 (kidney disorders e.g. Berger disease or other nephropathies associated with dermatitis, herpetiformis or Crohn's disease) and PRO1310/PRO844/PRO1312/PRO1312/PRO1387 (sports injuries and disease) and PRO1310/PRO844/PRO1312/PRO1312/PRO1387 (sports injuries and Sequence 2284 BP; 612 A; arthritis). The present sequence is a cDNA encoding a PRO protein Score Identity 440 370 590 590 230 14 H 160 160 450 450 2284 100% TTCCATCTTTGACCAGAAATTTGCCAAGCCAAGAGTTACCCCAGGAAGATTCTCTC 380 310 600 600 240 Conservative Substitutions Matches Optimized 460 460 390 576 C; 610 610 250 180 180 Score 464 G; 2004 14:41 Type: N 470 470 400 II 632 T; 0 U; 0 Other; 260 620 190 190 2284 2284 480 480 410 Mismatches Significance = 630 630 270 200 200 490 490 Check: 420 640 280 TCCTGACACTA 280 5044 210 210 500 500 0 55

2210 2180 2190 2200 2210 2220 2230 2240 2250 2260 2270 2280 X CCAGARGTAGTTCCTTCCAATTAATATTTGAATAATCTTTTGTTACTCAA		2020 2030 2040 2050 2070 2080 СТСТВАЛЬДТВАТТТАССТЬАВЬНОСАЛЬСТВИТЬ ОБОВОВОВОВОВОВОВОВОВОВОВОВОВОВОВОВОВОВО	1950 1960 1970 1980 2000 2010 CCTTCTGTTTTATGTTTTGGGTATGGAAGGAAGGGAAGTGGGGAACCAAATTAGGTAATTTTGGGTAATCTGT	1880 1890 1900 1910 1910 1920 1930 1940 TGACCTAGTGATCCACCTCCTCCGCCCCCAAACTGCTGGGATTACAGGCATGAGCCACACCACCACCACCACCACCACCACCACCACCACC	1810 1820 1830 1840 1850 1860 1870 ACACCTGGGTGATTTTTTTTAGTACAGACGGGTTTCACCATGTTGGTCAGGCTGGTCTCAAACTCC	1730 1740 1750 1760 1770 1800 TCCGTCTCGGGTTCAAGCGATTCTCCTGCCTCAGCCTCCTAAGTATCTGGGATTACAGGCATGTGCCACC	1660 1670 1680 1690 1700 1710 1720 1710 1720 1711 1720 1711 1720 1720	1590 1600 1610 1620 1630 1640 1650 CTGACTTGCTAGTCTTAGCAGGAGGAGGATTTTTTTTTT	1520 1530 1540 1550 1560 1570 1580
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US-09-944-929-82 (1-2284)ACA64519.SEQ Novel human secreted and transmembrane protein PRO

TOIG of: aca64519 check: 5044 from: 1 to: 2284

ACA64519 standard; cDNA; 2284 BP.

BXXXI ACA64519;

17-JUN-2003 (first entry)

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13 NOV-1997
24-NOV-1997
25-FEB-1998
20-MAR-1998
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07-WAY-1998
02-JUN-1998
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virucide; hepatotropic; antiinflammatory; neuroprotective; gene therapy;
PRO; pharmaceutical; diagnostic; blosensor; bloreactor; malignancy;
cancer; ovarian cancer; colorectal cancer; Kaposi's sarcoma; leukaemia;
lymphoma; hepatitis B; multiple sclerosis; Crohn's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19-NOV-2001;
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)-US028634.
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Ferrara N Grimaldi Ashkenazi AJ, ¥ 27 z Stewart Fong S, Baker KP, Botstein D, Desnoyers L, Ea ng S, Gerber H, Gerritsen ME, Goddard Gurney AL, Kljavin IJ, Napier MA, Pan rt TA, Tumas D, Watanabe CK, Williams y AL, Tumas) Eaton PA. Godowski Paoni NF; Wood WI; 먇 PJ;

WPI; 200 P-PSDB; 2003-352829/33. DB; ABU72590.

New genes and secreted and transmembrane polypeptides (e.g. PRO183 or PRO184), useful for treating or diagnosing e.g. ovarian cancer, Kaposi's parcoma, leukemia, lymphoma, hepatitis B, multiple sclerosis or Crohn's disease.

Claim 1; Fig 327; 663pp; English

The invention describes a new isolated nucleic acid molecule comprising the full length coding sequence of the DNA deposited with the American CType Culture Collection (e.g. ATCC Deposit No. 209521, 552-PTA, 819-PTA, CC 209439, 203135, etc), or a sequence with at least 80% identity to a DNA CC encoding a PRO polypeptide. The PRO polypeptides or polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or bioreactors. These are particularly useful for detecting or treating e.g. malignancies or CC cancers (e.g. ovarian cancer, colorectal cancer, Kaposi's sarcoma, CC leukaemia or lymphoma), hepatitis B, multiple sclerosis, or Crohn's CC disease in mammals. The PRO polypeptides are useful in drug screening, CC particularly as targets for therapeutic intervention in these diseases, CC and in the diagnostic determination of the presence of these diseases. CC The PRO polypeptides are also useful as molecular weight markers, or for Cromosome identification. The PRO genes are useful as hybridisation or probes, or for screening libraries of human cDNA, genomic DNA or mRNA.

730 740 750 760 770 780 790 790 780 790 780 790 790 780 790	650 660 670 680 700 710 720 TTACATGGCCAATTTTCACAAGCAGTCACTCCCCTAGCCCATCATCACACAGATTATTCAAAGCCCACCGAT	580 590 600 610 620 630 630 640 AGGATAATTACAGATTTTCCATCTTTGACCAGAAATTTGCCAAGCCAAGAGTTACCCAGGAAGATTCTCTC	510 520 530 540 550 560 560 AACTGCTACCTATTCTGCCACGAGGAGGCCTGTCCATTGAAACGAGCAGCAAAAAGGACTTACGATTACCATTGAAACGACCAAAAAGGACTTACGAGCAGCAAAAAGGACTTACGAGTTACGACTACCTAC	440 450 450 460 470 490 500 AGAAAAACATATCAGGGGACAACCC AGAGAAAACATATCAGGGGACAACCC AGACAACCAGCTAGACAACCC AGACAACCC AGACAACCAGGGGACAACCC AGACAACCAGCTAGACAACCC AGACAACACATCTCAGACAACCATCTAACATCTCGACACTCGAAAAACAGCTCGACACCC AGACACCC AGACAAAACATATCAGGGACAAAACATGTTAACTTCATGATCTTCGACACTCGAAAAAACAGCTAGACAACCC 470 480 490 500	370 380 390 10 420 10 420 10 10 10 10 10 10 10 10 10 10 10 10 10	290 300 310 320 330 340 350 360 AGCCTGTCAGTCAGTCAGTCAGTCAGTCAATAGAGAGATGTTGTCATTGACATCCAGTCATCTCTT	220 230 240 250 260 270 270 280 AAATTTAAAAATGTTCTTCGGGGGAGAAAGGGAGCTTGACTTGACTTTGGTAATAATTTGCTTCCTGACACTA	150 160 170 180 190 200 210 TGCAGCCTTCTTALAGCTAAACTAAACTG	80 90 100 110 120 130 140 GCTGTCCTCCACCTGATGGCAGGGGGCGCCGGGGTCCTCCACGCAGAGAGAATCTCATCATCTG	X	Significance = 0.5 Mismatches =	: N Che	Sequence 2284 BP; 612 A; 576 C; 464 G; 632 T; 0 U; 0 Other	CC replacing a defective gene. This sequence encodes a novel human secreted CC and transmembrane PRO polypeptide YY
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CTGACTTGCTAGTCTAGCAGGĀGGTTGTATTTTGĀĀGACAGGĀĀĀĀATGCCCCCTTTCTGCTTTTTTTTTT
1520 1530 1540 1570 1570 1570 1570 1570 1570 1570 157
1470 1480 1490 1500 CCGCAGGAAACGTTACTCAAGACTGGATTATTTGATCAATGGG
1370 1380 1390 1400 1410 1420 1430 GAAAAATGGCTTCTTATCGGGTCCCTGCTTTTGGTGTCCTGGTTCCTGGTGATAGGCCTCGTCCTCGTGCTCCTGGTTCCTGGTGATAGGCCTCCTCCTGGTGATAGGCCTCCTCCTGGTGATAGGCCTCCTCCTGGTGATAGGCCTCCTCCTCGGTGATAGGCCTCCTCCTCCTGGTGATAGGCCTCCTCCTCCTGGTGATAAAATGGCTTCTTATCGGGTCCTCCTGCTCTTTTGGTGTCCTCTGGTGATAGGCCTCCTCCTCGGTGATAGGCCTCCTCCTGGGTGATAGGCCTCCTCCTGGTGATAGGCCTCCTCCTGGTGATAGGCCTCCTCCTGGTGATAGGCCTCCTCCTGGTGATAGGCCTCCTCCTGGTGATAGGCCTCCTCCTGGGTGATAGGCCTCCTCCTGGTGATAGGCCTCCTCCTGGGTGATAGGCCTCCTCCTGGGTGATAGGCCTCCTCTGGGTGATAGGCCTCCTCCTGGGGTAAAAATGGCCTCTTTTTTTT
1300 1310 1320 1330 1340 1350 1360 1360 1360 1360 1360 1360 1360 136
1230 1240 1250 1260 1270 1280 1290 AARICTGTATAAACCCTACTGCACTTCCAAATGTGGAGTCTTCCACAATGATGATAAAACTGCTTCCCTGG [
1160 1170 1180 1190 1200 1210 1220 1200 1210 1220 1210 1220 1210 1220 1210 1220 1210 1220 1210 1220 1210 1220 1210 1220 1210 1220 1210 1220 1220 1220 1220 1220 1220 1220 1220 1220 1220
1090 1100 1110 1120 1130 1140 1150 GTTTTTACACGGCTGCGGCTACACTCCAAGCAATGGCTACACAGCAGTTCTGACTACCACCTTTCAGGCA
1010 1020 1030 1040 1050 1060 1070 1080 CCACAGCTGCCACCACGACCCTGTAACCACTGTCAGCCTTCCAGCCTCCACGACCCTGTATTCTCAGCCTCCACGACCCTGTATTCTCAGCCTCCACGACCCTCCATTTCTCAGCCTCCACGACCCTCCATTTCTCACACTGTCACCTCCACGACCCTCCACTGTCACCACTGTCACCTTCTCAGCCTCCACGACCCTCATTTCTACACACTGCACCCTCCACCACCACCACCACCACCACTGTAACCACTGTCACTTCTCAGCCTCCACCACCACCACTTTCTACACACTGTCACACTGTCACACTGTCACACTGTCACACTGTCACACTGTCACACTGTCACACACCTCCACTGTAACCACTGTCACACTGTCACACCACCACCACTATTTCTACACACTGTCACACACCACACACCACACACA
940 950 1000 ACCTROGGCTACTCCAAAGCCCGCCACCCTTCTACCCACAATGCTTCAGTGACACCTTCTGGGACTTCCCAG
870 880 890 910 920 930 GAAATAGCTCATCTGCTGAAAATGTGAGTGCGCTCCCAGCTACGGTGGCAGTTGCTTCTCCACATACC
810 810 820 830 840 850 860 GAAGCAAGTGCCCAGCTCCTTGCTTATAAGGAAAAAGGCCATTCTCAGAGTTCACAATTTTCCTCTGATCAA

inflammatory disease; organ failure; atherosclerosis; cardiac injury; infertility; birth defect; premature aging; cardiac injury; AIDS; can diabetic complication.

cancer;

2170 2180 2190 2210 2220 2230 TAAAATCAACTGTTATATCAACTTCTAATGGATTTCCTTTTTATATGGATTCCTTTAAAACTTAAT	0 2100 2110 2120 21: CAACTGGCTTTTATGCAAAACAAGAGTTAGGACATCTAG[020 2030 2040 2050 TCTAAAATATTAGCTAAAAAACAAAGCTCTATGTAAAGTA	1950 1980 CTTCTGTTTTATGTTTGGTTTTTGAGAAGGAATGAAGTG	1880 1890 1900 1910 GACCTAGTGATCCACCCTCCTCGGCCTCCCAAAGTGCTG	1810 1820 1830 1840 1850 1860 1870 CACCTGGGTGATTTTTGTATTTAGTAGAACAGGGTTTCACCATCTTGGTCAGGCTGGTCTCAAACTCC	0 1740 1750 1760 17 CCGTCTCCTGGGTTCAAGCGATTCTCCTGCCTCAGCCTC 	660 1670 1680 1690 TTTTGGAGAAGAGT TTTTGGAGAAGAGT	1590 1600 1610 1620 1630 1640 1650
2170 2180 2190 2200	2170 2180 2190 2200 TAAAATCAACTGTTTAATATCAATTTCTTAATGGATTTGCTTT	0 0	40-04 0 H-H	1950 1960 1970 1980 1990 2010 CCTTTGTTTTATGTTTTGGTTTTTGAGAAGGAATGAAGTGGAACCAAATTAGGTAATTTTGGTTATTGGTTTTTAGGTATTTTGAGAAGGAATGAAGTGGAACCAAATTAGGTAATTTTGGTTATTTTGGTTTTTAGGTAAGAATGAAATTAGGTAAATTAGGTAATTTTGGTTATTTTGGTTAGAAAGAAG	H-H 0-0 40-04 H-H	V-4 H-H 0-0 40-04 VH-HV H-H	0 0 7 7	H-H WH-HW WH-HW H-H H-HW H-H-HW

US-09-944-929-82 (1-2284)
ABX96832.SEQ Human cDNA encoding secreted/transmembrane protein

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ABX96832 standard; cDNA; 2284 BP. check: 5044 from: ÷0:

TOIG of: abx96832

ABX96832

15-MAY-2003 (first entry)

Human CDNA encoding secreted/transmembrane protein PRO361.

Human; ss; gene; PRO; secreted protein; transmembrane protein; Cornelia de Lange syndrome; gene therapy; immune disorder;

18 DEC 1997
05 - LAN 1998
09 - FEB 1998
25 - FEB 1998
16 - SEP 1998
16 - DEC 1998
16 - DEC 1998
22 - DEC 1998
22 - DEC 1999
30 - NOV 1999
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30 - NOV 1999
31 - FEB 2000
22 - FEB 2000
30 - MAR 2000 16-DEC-17-DEC-17-DEC-12-DEC-16-DEC-11-DEC-1997; 11-DEC-1997; 03-DEC-1997; 31-AUG-2001; 2001US-00944944 21-NOV-2002. US2002173463-A1. Homo sapiens 16-DEC 11-DEC-1997; 1997; 99WO-USO28301. 99WO-USO30095. 2000WO-USO03565. 2000WO-USO05841. 2000WO-USO08439. 2000WO-USO14042. 2000WO-USO12678. 2000WO-USO32678. 2001WO-USO32678. 2001WS-00866028. 98WO-US025108.
98US-0112850P
98US-0113296P
99WO-US012252.
99US-0146222P
99US-0146222P
99WO-US021090.
99WO-US021090. 97US-0069702P. 97US-0069870P. 97US-0069873P. 97US-0068017P. 98US-0070440P. 98US-0074086P. 98US-0074092P. 98US-0075945P. 98WO-US019330.

(GETH) GENENTECH INC. N

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Baker KP, Gerritsen M Hillan KJ, л МЕ, ос. «Л, Kljavin Л Botstein D, ME, Goddard ! Kljavin IJ, Þ, Eaton DL, F A, Godowski Napier MA, Ferrara N, Filvaroff E; i PJ, Grimaldi JC, Gurney AL; , Roy MA, Tumas D, Wood WI;

WPI; 2003-311003/30. ABU64930.

New transmembrane polypeptides and polynucleotides useful for chromosome identification, tissue typing, gene therapy, in chromosome and gene mapping, or as molecular weight markers.

Claim 2; Fig 31; 172pp; English.

The invention relates to an isolated nucleic acid encoding a secreted/ transmembrane polypeptide (designated as PRO proteins). 15 PRO polypeptides and their encoding polynucleotides are disclosed. Also included are a vector comprising the PRO nucleic acid, a host cell comprising the vector, a process for producing a PRO polypeptide (by culturing the host cell under conditions for the expression of the PRO polypeptide, and recovering the PRO polypeptide from the cell culture, an isolated polypeptide having at least 80% amino acid sequence identity to the PRO polypeptides, a chimaeric molecule comprising PRO fused to a heterologous amino acid sequence and an antibody which specifically binds

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Residue Identity =
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                                                                                                                                                                                                                                                                                                                                AGGATAATTACAGATTTTCCATCTTTGACCAGAAATTTGCCAAGGCAAGAGTTACCCCAGGAAGATTCTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                       to PRO. The PRO nucleotide sequences are useful as hybridisation probes, in chromosome and gene mapping, in generating sense and antisense RNA or DNA, in generating transgenic or knock-out animals which can be used in the development and screening of therapeutically useful reagents, and in gene therapy. The polypeptides may be used as molecular weight markers for protein electrophoresis purposes. The PRO polypeptides and nucleic acids may also be used for chromosome identification, and tissue typing. PRO241 (identified as Chordin) is a candidate gene for Cornelia de Lange syndrome. Other PRO proteins are variously implicated in immune disorders, inflammatory disease, organ failure, atheroselerosis, cardiac injury, infertility, birth defects, premature aging, cardiac injury, ALDS, cancer and diabetic complications. The present sequence encodes a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 2284 BP; 612 A; 576 C; 464 G; 632 T; 0 U; 0 Other;
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AGAATCCTTTCGGAATCACTCCGCAGGAAACGTTACTCAAGACTGGATTATTTGATCAATGGGATCTATGTG

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PR 04-JUN-1998; 98US- PR 04-JUN-1998; 98US- PR 04-JUN-1998; 98US- PR 04-JUN-1998; 98US- PR 04-JUN-1998; 98US- PR 05-JUN-1998; 98US- PR 05-JUN-1998; 98US- PR 05-JUN-1998; 98US- PR 05-JUN-1998; 98US- PR 10-JUN-1998; 98US- PR 10-JUN-1998; 98US- PR 10-JUN-1998; 98US- PR 10-JUN-1998; 98US- PR 11-JUN-1998; 98US- PR 16-JUN-1998; 98US- PR 16-JUN-1998; 98US- PR 16-JUN-1998; 98US- PR 16-JUN-1998; 98US- PR 16-JUN-1998; 98US-
PR 10-JUN-1998; 98US-0088; PR 10-JUN-1998; 98US-00888; PR 10-JUN-1998; 98US-00888; PR 10-JUN-1998; 98US-00888; PR 11-JUN-1998; 98US-00888; PR 11-JUN-1998; 98US-0089; PR 12-JUN-1998; 98US-0089; PR 16-JUN-1998; 98US-0089; PR 16-JUN-1998; 98US-0089; PR 16-JUN-1998; 98US-0089;
DB 17_TIN_1008. 00116_00808

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01-DEC-1998;
05-JAN-1999;
08-MAR-1999;
15-SEP-1999;
15-SEP-1999;
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10-JAN-2000;
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99WO-US021547

99WO-US021547

99WO-US028331

99WO-US02830

99WO-US03095

99WO-US030356

2000WO-US000376

2000WO-US0004914

2000WO-US00504

2000WO-US00505

2000WO-US005

2000WO-US005
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(GETH $\overline{}$ GENENTECH INC.

Ashkenazi AJ, Baker K Ferrara N, Fong S, G Grimaldi JC, Gurney A Roy MA, Stewart TA, Zhang Z; KP, Botstein D, Desnoyers L, Eaton Gerber H, Gerritsen ME, Goddard A, AL, Kljavin IJ, Napier MA, Pan J, Tumas D, Watanabe CK, Williams PM, Paoni Wood DL; Godowski PJ;

WPI; 2003-288106/28. P-PSDB; ABU60623.

New transmembrane polypeptides and nucleic acids encoding the polypeptides, useful in gene therapy, in chromosome identification, chromosome markers, or in generating probes.

Claim <u>ب</u> Fig 327; 650pp; English

The invention discloses isolated PRO secreted/transmembrane polypeptides comprising a sequence without signal peptide and the nucleic acid encoding them. The polypeptides can be used to raise antibodies that specifically bind to the PRO polypeptide, for linking a bioactive molecule to a cell expressing a PRO protein and for modulating at least one biological activity of a cell. The PRO polypeptides or polymucleotides are also useful in gene therapy, in chromosome identification, as chromosome markers, or in generating probes. The PRO polypeptides are useful as molecular markers for protein electrophoresis, and the isolated nucleic acids may be used for recombinantly expressing those markers. The PRO polypeptides and nucleic acids may also be used in tissue typing. Anti-PRO antibodies are useful in diagnostic assays for PRO, and in affinity purification of PRO from recombinant cell culture or natural sources. The sequences presented in ABX90083-ABX90468 are the amplifying and probes detecting the

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340 340 350 360	650 660 670 680 TTACATGGCCAATTTTCACAAGCAGTCACTCCCCTAGCCCATCATC	580 590 610 620 630 AGGATAATTACAGATTTTCCATCTTTGACCAGAAATTTGCCAAGCCAAGAGTTAC	\$10	440 450 460 ACANANACATATCAGGGACAAAGCATGATCATCAGGGACAAAGCATGATAACTTGATGATCTTCGA	370 370 380 390 390 390 390 390 390 390 390 390 39	290 300 310 320 330 AGGCTGTCTGCTAGTCAGAATTGCCTCAAAAAGAGTCTAGAAGATGTTGT	220 230 240 250 260 270 260 270 280 AAATTTAAAATGTTCTTCGGGGGAAAGGGAAGGTTGACTTACACTTTGGTAATAATTTGCTTCCTG.	150 160 170 180 190 TGCAGCCTTCTTAAAGCAAACTAAGACGAGGGAGGATTATCCTTGAC	80 90 100 110 GCTGTCCTCGCACCTGGATGGCAGCAGCGGGGGCGCGGGGTCCTCCTCGA	X	Initial Score = 2284 Optimized Score = 22 Residue Identity = 100% Matches = 22 Gaps = 0 Conservative Substituti	X90451 Length: 2284 September 29, 2004 14:41	CC polynucleotides of the invention. Note: The CC is also available in electronic format from CC seqdata.uspto.gov/sequence.html XX SQ Sequence 2284 BP; 612 A; 576 C; 464 G; 632 T	
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1520 1530 1540 1550 1560 1570 1580 GACATCTAAGGATGGAACTCGGTGTCTCTTAATTCATTTAGTAACCAGAAGCCCAAATGCAATGAGTTTCTG [
1450 1460 1470 1480 1490 1500 1510 AGAATCCTTTCGGAATCACTCCGCAGGAAACGCTTACTCAAGACTGGATTATTGATCAATGGGATCTATGTG
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1230 1240 1250 1260 1270 1280 AATGTGTATAAACTGCATTCTATGTCAAATGGAGTCTTCCACTATGAATAAAACTGCTTCCTGG AATGTGTATAACCCTACTGCACTTTCTATGTCAAATGTGGAGTCTTCCACTATGAATAAAACTGCTTCCTGG
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1010 1020 1030 1040 1050 1060 1070 1080 CCACAGCTGGCCACCACAGCTCCACCTGTAACCACTGTCACCTCCACCTCCACCGACCCTCATTTCTACA
940 950 960 970 980 990 1000 ACCTCGGCTACTCCAAAGCCCGCCACCCTTCTACCCACCATGCTTCAGTGACACCTTCTGGGACTTCCCAG
870 880 890 910 920 930 GARATAGCTCATCTGCTGCCTGAAAATGTGAGTGCGCTCCCAGCTACGGTGGCAGTTGCTTCTCCACATACC
830
ATCTCATGGAGAGACACACTTTCTCAGAAGTTTGGATCCTCAGATCACCTGGAGAAACTATTTAAGATGGAT

TAAAATGITTATATAAAACATTICTAATGATTICTATTICTTATATATGATTCCTTTATATATATATATATATATATAT	2150 CACATTCT ACATTCTTT	2020 2030 2040 2050 2060 2070 2080 CTCTAAAATATTAGCTAAAAGCACAAGCTCTATGTAAAGTATAAAGTATAATTTGCCATATAAATTTCAAAAT [1950 1960 1970 1980 2010 CCTTCTGTTTTATGTTTTGGAGAGGAATGAAGTGGGAACCAAATTAGGTAATTTTGGGTAATCTGT [1880 1890 1900 1910 1920 1930 1940 TGACCTAGTGATCCACCCTCCGCCCCCCCCCCCCGCCTGGGATTACAGGCATGAGCCACCACGCTGGCCC	1810 1820 1840 1850 1850 1860 1870 ACACCTGGGTGATTTTTTAGTAGAAACGGGGTTCACCATGTTGGTCAGGTCTCAAACTCC	1730 1740 1750 1760 1770 1780 1800 TCCGTCTCCTGGGTTCAAGCCATTCTCCTGCCTCAAGCCTCCTAAGTATCTGGGATTACAGGCATGTGCCACC	1660 1670 1680 1700 1710 1720 TTTTGGAGACAGAGTCTTGCTCTGTTGCCCAGGCTGGAGTGCAGTAGCACGATCTCGGCTGCTCACCGCAACC	
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US-09-944-929-82 (1-2284)
 ABX80978.SEQ Human secreted/transmembrane protein cDNA, #182.

TOIG of: abx80978 check: 5044 from: 1 to: 2284

D ABX80978 standard; cDNA; 2284 BP.

CX STREET,

ID ABX80978;
XX ABX80978;
AC ABX80978;
XX DT 22-APR-20;
XX DT 22-MPR-20;
XX Human sec:
XX Human; ge:

DT 22-APR-2003 (first entry)

DE Human secreted/transmembrane protein cDNA, #182.

Human; gene; ss; PRO; secreted; transmembrane; pharmaceutical;

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ent enzyme mediated prodru 101US-00997428. 97US-0049787P. 97US-0065250P. 97US-0065186P. 97US-0065311P. 97US-0065311P. 97US-00667311P. 97US-0081700P. 98US-0081710P. 98US-0081710P. 98US-0081710P. 98US-0081710P. 98US-0081710P. 98US-0081710P. 98US-0081710P. 98US-0081710P. 98US-0081712P. 98US-0088022P. 98US-0088121P. 98US-0088121P. 98US-0088121P. 98US-0088151P. 98US-0088151P. 98US-0088151P. 98US-0088151P. 98US-0088151P. 98US-008951P.	losensor; bioreactor; tumour; therapeutic; gene therapy;
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99US-0141037P.
99US-0144788P.
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99US-014396P.
99WO-US021090.
99WO-US021090.
99WO-US021199.
99WO-US021199.
99WO-US020311.
199WO-US00371.
199WO-US00371.
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199WO-US00371.
199WO-US00311.
199WO-US00371.
199WO-US00
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Ferrara N Grimaldi Roy MA, Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton Ferrara N, Fong S, Gerber H, Gerritsen ME, Goddard A, Grimaldi JC, Gurney AL, Kljavin IJ, Napier MA, Pan J, Roy MA, Strwart TA, Tumas D, Watanabe CK, Williams PM, Godowski I Paoni NF; Wood WI; ₽J;

2003-201194/19. DB; ABU59339.

New antibodies that bind tumor-associated antigenic target (TAT) golypeptides, useful for treating and diagnosing tumor (e.g. bre lung, liver or stomach tumor) in mammals, e.g. dogs, cats, cattl goats, rabbits or humans. cattle, pigs, breast,

Claim 2 Fig 579pp; English

Residue Identity Gaps Initial ABX80978 CC and the nucleic acid encoding them. The polypeptides can be used to raise CC antibodies that specifically bind to the PRO polypeptide, for linking a CD bioactive molecule to a cell expressing a PRO polypeptide, for linking at CC least one biological activity of a cell and as a tumour-associated CC antigenic target (TAT) polypeptide inhibitor. The PRO polypeptides, cc polynucleotides and antibodies are also useful as pharmaceuticals, cc tumours (e.g. breast, lung, liver or stomach tumour) in mammals (e.g. cds, cattle, horses, sheep, pigs, goats, rabbits or preferably cc dogs, cats, cattle, horses, sheep, pigs, goats, rabbits or preferably cc for chromosome identification. The PRO genes are useful as molecular weight markers cor for chromosome identification. The PRO genes are useful as cor for chromosome identification. The PRO genes are useful as cor for chromosome identification. The PRO genes are useful as cor for chromosome identification. The PRO genes are useful as correct manna. The PRO genes may also be used in gene therapy, particularly corresplacing a defective gene. The antibody may also be used in antibody corresplacing the promes may also be used in antibody corresplacing the promes may also be used in antibody corresplacing the promes may also be used in antibody corresplacing the promes may also be used in antibody corresplacing the promes may also be used in antibody corresplacing the promes amplifying and the probes detecting the PRO playmuleotides of the invention. Note: The sequence data for this patent is correct format from the probes detecting the PRO playmuleotides of the invention. Note: The sequence data for this patent encoding, the primers amplifying and the probes detecting the PRO polynuclectides of the invention. Note: The sequence data for this patent is also available in electronic format from USPTO at segdata.uspto.gov/sequence.html. In addition some of the sequences after ABX80734 (SEQ ID NO:163) are not referred to or shown in the specification as the source document appears to missing a number of pages Sequence Score 80 Length: 2284 BP; 612 11 11 11 160 2284 2284 100% 0 September Matches Conservative Optimized A; 576 100 29, C; 464 G; 632 T; 0 U; 0 180 Score = 2004 110 Substitutions 14:42 2284 2284 120 Type: Significance Mismatches z Other; 130 Check: 11 5044 210 0.55 0 140 pages

100 200	510 520 530 540 550 560 570 AACTGCTACCTATTTTCTGTCCCAACGAGGAAGCCTGTCCATTCAAACCAGCAAAAGGACTTATGAGTTAC
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1740 1750 1760 1770 1770 1770 1800 1800 1770 1800 1770 1770 1800 1770 1770 1770 1770 1800 1770	### ##################################
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TOIG of: abx80474 check: 5044 from:
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ABX80474.SEQ Novel human
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 12-NOV-1997
13-NOV-1997
24-NOV-1997
25-FEB-1998
20-MAR-1998
20-MAR-1998
27-MAY-1998
28-PR-1998
07-MAY-1998
07-JUN-1998
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17-OCT-1997;
05-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cardiac insufficiency disorder; cancer; tumour; immune response; adrenal cortical capillary endothelial growth; c-fos induction; vascular endothelial growth factor inhibition; VEGF inhibition; endothelial cell growth inhibitor; T-lymphocytes stimulation; entinal neurons cell survival; rod photoreceptor cell survival; retinal disorder; retinitis pigmentosum; kidney disorder; mammalian kidney mesangial cell proliferation; Berger disease; dermatitis; herpetiformis; Crohn's disease; chondrocyte proliferation; chondrocyte redifferentiation; sports injury; arthritis; gene; ds.
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97US-0066770P
98US-0075945P
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17-SEP-1998
07-OCT-1998
07-OCT-1998
07-OCT-1999
01-DEC-1999
15-SEP-1999
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16-DEC-1999
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98US-008953P

98US-0089600P

98US-0089600P

98US-0089601P

98US-0089601

99US-US00251

99US00251

99US-US00251

99
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GENENTECH INC.

Ashkenazi i Ferrara N, Grimaldi Ju Roy MA, Si Zhang Z; zi AJ, Baker I N, Fong S, (i JC, Gurney i Stewart TA, KP, Botstein D, Desnoyers L, Eaton Gerber H, Gerritsen ME, Goddard A, AL, Kljavin IJ, Napier MA, Pan J, Tumas D, Watanabe CK, Williams PM, Godowski PJ; Paoni NF; Wood WI;

WPI; 2003-247083/24. P-PSDB; ABU59193.

Novel isolated PRO polypeptides e.g., PRO826, PRO1068, PRO1184, PRO1346 and PRO1375, which stimulate proliferation of stimulated T-lymphocytes are therapeutically useful for enhancing immune response and in cancer

Claim 2; Fig 329; 648pp; English.

The invention describes an isolated human PRO polypeptide. The PRO Colypeptides are useful in detecting PRO polypeptides in a sample, in CC linking a bloactive molecule to a cell expressing a PRO polypeptide, and civity of a cell expressing a PRO polypeptide, and clin modulating at least one biological activity of a cell expressing a PRO polypeptide, and complete the properties of the properties are thus caseful for treating conditions or disorders where angiogenesis would be peneficial, e.g. wound healthy and antagonist of this polypeptide are consecul for treating conditions or disorders where angiogenesis would be peneficial for treating cancerous tumours. PRO812 inhibits vascular cell send is thus useful for inhibiting endothelial cell growth in cells and is thus useful for inhibiting endothelial cell growth in cells and proliferation of endothelial cell growth in proliferation of endothelial cell growth in the proliferation of cells prophocytes and are therapeutically useful for enhancing cells (PRO11046 and PRO1375 stimulate proliferation of retinal neurons cells (PRO1132 is also enhances survival/proliferation of conditions of injuries, e.g. retinitis pigmentosum, AMD. PRO813 proliferation of conditions and proliferation of treating terming retinal cells and PRO1306 induce proliferation of mammalian kidney mesangial cells, and therefore are useful for treating retinal cells, and proliferation of disorders associated with dermatitis, herpetiformis or Crohn's cand therefore are useful for treating sports injuries, and arthritis. This sequence crowless and proliferation of chondrocytes in culture and are thus useful for treating sports injuries, and arthritis. This sequence

Sequence 2284 BP; 612 A; 576 C; 464 G; 632 T; 0 U; 0 Other;

Initial Score Residue Identity ABX80474 Length: 2284 September 29, 2004 14:40 Type: N Check: 5044 100 110 120 130 140 GCTGTCCTCGCACCTGGAGAGAGATCTCATCTG | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 GCTGTCCTCGCACCTGGATGGCAGCAGGGGCGCCGGGGTCCTCTCGACGCCAGAGAAAATCTCATCATCTG u a a 100**%** 0 Optimized Score = 2284
Matches = 2284
Conservative Substitutions 2284 Significance = 2284 Mismatches =

AATGTGTATAACCCTACTGCACTTTCTATGTCAAATGTGGAGTCTTCCACTATGAATAAAACTGCTTCCTGG

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2090
2170
                                  2100
                 2180
                                  2110
                 2190
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                 2200
                                  2130
                 2210
                                  2140
                 2220
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US-09-944-929-82 (1-2284)
ABX78486.SEQ DNA encoding Novel human secreted protein PRO361.

ABX78486 standard; DNA; 2284 BP.

TOIG of: abx78486 check: 5044 from: 1

to: 2284

14-APR-2003 (first entry)

DNA encoding Novel human secreted protein PRO361.

Human; antiinflammatory; antiarteriosclerotic; cardiant; gynecological; anti-HIV; cytostatic; antidiabetic; BMP-agonist; BMP-Antagonist; cytokine-antagonist; BMP-agonist; BMP-Antagonist; cytokine-antagonist; gene-Therapy; inflammatory disease; organ failure; atherosclerosis; cardiac injury; infertility; birth defect; premature aging; AIDS; cancer;

diabetic complication; gene; ds.

Homo sapiens.

US2002150976-A1.

17-OCT-2002.

30-AUG-2001; 2001US-00943851

12-DEC-1997; 16-DEC-1997; 16-DEC-1997; 16-DEC-1997; 16-DEC-1997; 03-DEC-1997; 17-DEC-1997 11-DEC-1997 97US-0069870P 97US-0067411P -0069873P

98US-0070440P. 98US-0074086P. 98US-0074092P. 98US-0075945P. 98WO-US019330. 97US-0068017P

18-DEC-1997
05-JAN-1998
09-FEB-1998
09-FEB-1998
16-SEP-1998
11-DEC-1998
16-DEC-1998
16-DEC-1998
22-DEC-1998
22-DEC-1998
22-DEC-1998
22-DEC-1999
28-JUN-1999
28-JUN-1999
30-NOV-1999
30-NOV-1999
31-DEC-1999 98WO-US025108 98WS-00216021 98US-00218517 98US-00113296P 99US-0113296P 99US-0113252 99US-0146222P 99WO-US012252 99WO-US028313 99WO-US028313 99WO-US028301 99WO-US030095

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Initial
Residue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABX78486 Length: 2284 September 29, 2004 14:42 Type: N Check: 5044
                                     GCGGAGCATCCGCTGCGGCGGAGACCCCCCGCGCGGGATTCGCCGGGTCCTTCCCGCGGGGCGCGACAGA
X 10 20 30 40 50 60 70
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22-FEB-2000; 2000WO-US0054414.
02-MAR-2000; 2000WO-US005841.
30-MAR-2000; 2000WO-US008439.
22-MAY-2000; 2000WO-US014042.
28-UTL-2000; 2000WO-US027710.
01-DEC-2000; 2000WO-US032678.
28-FEB-2001; 2001WO-US006520.
25-MAY-2001; 2001WS-00866028.
                                                                                                                                                                                                                  370 380 390 400 410 420 430 TCTAAGGGAATCAGAAGACTGCATTAATTCTTGCTGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Baker KP, I
Gerritsen MI
Hillan KJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention describes a novel isolated PRO polypeptide. The methods and compositions of the present invention are useful for the diagnosis and treatment of disorders such as inflammatory disease, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, AIDS, cancer, diabetic complications and mutations in general. This sequence encodes a novel human secreted PRO protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New isolated PRO polypeptide and encoding nucleic acids, useful for the diagnosis and treatment of disorders such as inflammatory disease, atherosis, cardiac injury, infertility, AIDS, cancer and diabetic necessary.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        complications.
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P-PSDB; ABU58364.
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WJ, Kljavin IJ,
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Matches = 2284
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A, Godowski PJ, Grimaldi JC, Gurney AL;
Napier MA, Roy MA, Tumas D, Wood WI;
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TGCACT	CAGCTT	100 GGCTAC 	1030 AGCTCC AGCTCC	96 		CCTTC	740 ACACTTTCT ACACTTTCT	670 CACAAGC CACAAGC	FO TTCCATC	CTGTCC CTGTCC	50 IGGGACAAA IGGGACAAA	
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GTGGAG	90 TTTACA TTTACA	1120 GCTACAA GCTACAA 1120	- <u>G</u> _G-	970 TACCCACCAAT TACCCACCAAT 970	900 GCGCTCCCAGC GCGCTCCCAGC	GGCCATTO	760 \TCCTCAGA \TCCTCAGA	690 3000AT 	62 TTGCCAA TTGCCAA	S40 SCTGTCCA 	ATGATC	
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120 ACTATGJ	TCCAACT	1130 SCAGTTCTGJ 3CAGTTCTGJ 1130	1060 	990 	166 	AGTTCA 	70 CTGGAGAAA CTGGAGAAA	700 ACAGATT ACAGATT 700	630 GAGTTA GAGTTA 630	CCAGCA CCAGCA	ACTCGA ACTCGA	
80 AATAAAA 	1210 FTAACTT [TTAACTT 1210	1140 ACTACCA ACTACCA 1140	107 ACGACCC ACGACCC	CCTTCTC	920 AGTTGCTT 	850 CAATTTT CAATTTT 850	780	710 TATTCAAA TATTCAAA TATTCAAA	CCCCAGG	560 PAAAAGGAC PAAAAGGAC S60	490 ;AAAAACAG AAAAACAG 490	
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CCTGG	ACAGGG ACAGGG ACAGGG ACAGGG	1150 PAGGCA AGGCA	1080 CTACA CTACA	rcccag 	CATACC	SO SATCAA SATCAA	790 \TGGAT \ \TGGAT \TGGAT 790	720 ACCGAT ACCGAT 720	CTCTC	AGTTAC 	DAACCC DAACCC DAACCC	

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2 CCAGA CCAGA 2	TAÀAÁ TAAAA	2090
2240 HTGTAGTTC H HTGTAGTTC 2240	2170 TCAACTGT TCAACTGT 2170	2100
2240 2250 2260 2270 2280 X CCAGATGTAGTTCCTTCCAATTAAATATTTGAATAAATCTTTTGTTACTCAA	2170 2180 2190 2200 2230 TAAAATCAACTGTTTATATCAATTTCTAATGGATTTGCTTTTTATATATGGATTCCTTTATATATCTAATACTTATT TAAAATCAACTGTTTATATCAATTCTAATGGATTTGCTTTTTATATATGGATTCCTTTAATACTTATT TAAAATCAACTGTTTATATCAATTTCTAATGGATTTGCTTTTTATATGGATTCCTTTAAAACTTATT 2170 2180 2190 2200 2210 2220 2230	2110
2260 \ATATTTGAA \ATATTTGAA 2260	2190 FTCTAATGGA TCTAATGGA 2190	2120
2270 TAAATCTTTT TAAATCTTTT 2270	2200 TTTGCTTTTC TTTGCTTTTC 2200	2130
2280 X IGTIACTCAA GTIACTCAA IGTIACTCAA 2280 X	2210 TTTTTATATGC TTTTTATATGC 2210	2140
	2220 ATTCCTTTAA 	2150
	2230 AACTTATT 	2160

æ • US-09-944-929-82 (1-2284) ABX77120.SEQ cDNA encoding human PR0361 protein.

TOIG of: abx77120 check: 5044 from:

ABX77120 standard; cDNA; ВP

04-APR-2003 (first entry)

encoding human PRO361 protein

Gene; ss; human; antiinflammatory; antiarteriosclerotic; cardiant; anti-inferrility; anti-HIV; cytostatic; antidiabetic; transmembrane; antiinflammatory; anti-HIV; antiarteriosclerotic; cardiant; inferrility; anti-inferrility; cytostatic; antidiabetic; gene therapy; birth defect; inflammatory disease; organ failure; atherosclerosis; cardiac injury; premature aging; AIDS; cancer; diabetic complication.

Homo sapiens.

US2002142958-A1

30-AUG-2001; 2001US-00943762

16-SEP-1998; 98WO-US019330.
01-DEC-1998; 98WO-US025108.
22-JUN-1999; 99WO-US021090.
15-SEP-1999; 99WO-US021090.
30-NOV-1999; 99WO-US028301.
30-NOV-1999; 99WO-US028301.
16-DEC-1999; 99WO-US028301.
16-DEC-1999; 99WO-US030095.
11-FEB-2000; 2000WO-US003665.
22-FEB-2000; 2000WO-US0036841.
30-MAR-2000; 2000WO-US00841.
30-MAR-2000; 2000WO-US005841.
30-MAR-2000; 2000WO-US005841.
30-MAR-2000; 2000WO-US002670.
01-DEC-2000; 2000WO-US002670.
01-DEC-2000; 2000WO-US002670.
28-FEB-2001; 2001WO-US006520.
25-MAY-2001; 2001US-00866028.

GENENTECH INC.

Baker KP, Gerritsen N Hillan KJ, J ME, w. J. Kljavin 7 Botstein D, ME, Goddard *I* Kljavin IJ, A, Eaton DL, F A, Godowski Napier MA, Ferrara N, Filvaroff E; i PJ, Grimaldi JC, Gurney AL; Roy MA, Tumas D, Wood WI;

WPI; 2003-174140/17. P-PSDB; ABU57251.

New secreted and transmembrane nucleic acids and polypeptides, designated as PRO, useful for treating inflammation, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, AIDS, or

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Initial Score = Residue Identity = Gans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABX77120 Length: 2284 September 29, 2004 14:42 Type: N Check: 5044
                                                                                                                                                                                                                                                                                    510 520 530 540 550 560 570 ARCIGCTACCTATTTTCTGTCCCAACGAGGAAGCCTGTCCATTGAAACCAGCAAAAGGACTTATGAGTTAC
                                                                                                                                                                                             invention may have antiinflammatory, antiarteriosclerotic, cardiant, anti-infertility, anti-HIV, cytostatic and antidiabetic activities and may be used in gene therapy. The nucleic acids and polypeptides are useful for treating inflammatory diseases, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, AIDS, cancer, or diabetic complications. The nucleic acids are useful as hybridisation probes, in chromosome and gene mapping, and in generating antisense RNA or DNA. The polypeptides are useful as pharmaceuticals, diagnostics, biosensors or bioreactors. Both are useful in tissue typing. The present sequence represents a nucleic acid sequence of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 2284 BP; 612 A; 576 C; 464 G; 632 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This invention relates to a nucleotide sequence encoding an isolated secreted and/or transmembrane protein. The nucleotide sequences of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 2; Fig 31; 173pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2284 Optimized Score = 2284
100% Matches = 2284
0 Conservative Substitutions
                                                                                                                                                                              380
                                                                                                                                                                                390
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                                                                                                                                                                              400
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	70 	300 AAGG AAGG	123 1GT	CTAC	77 77 77 77 77 77 77	CACA	4 C - C 4	87 AAAT AAAT 87	AAGC	0-0 0-0	ACA	8 9 9 8
14	ATG ATG	TAGGG TAGGG	° G — G °	160 	TAC	0 	ନ୍ଧ୍ର=ନ୍ତ	0 8 - 8 0	800 1110 800	ATG	10—0 0—0	TAATT
50	138	~ ~ ~ ~ ~ ~	TAA	3-3	90 ACG	102	CTAC	CTCA CTCA	9—9 0—0	30 GAG 30	88 — B 8	<u>8</u> —8
	01-10	.310 	10001	GA A A	666 666 666 666 666 666 666 666 666 66	0 2 - 20	950 950 950	검프검	<u>2</u> —2	GAGA	ATTTT	590 AG <i>I</i> HIII S90
_	TAT	CAGT	TAC	117 AGG AGG	10001	8=8		16016 16016 16016 16016	81 	CAC CAC	$\alpha - \alpha$	1—1 1—1 1—1
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	3—3 3—3	° (2 – (2 °)	250 117 117 250	AGA AGA 111	3-3	CACCTO	oga CAC CAC CAC CAC CAC CAC CAC CAC CAC CA	890 3AAAA1 3AAAA1 890	CTTA CTTA 8	₽≡₽	GCAGTCA	OO CTTTGA CTTTGA
1470	14 		TATGT	.180 	1100000	_ HH	CCACCCTTC) ATGTGA ATGTGA	20 TAAGGAAA ETAAGGAAA 20	750 GAAG GAAG 750	(1—(1	$\alpha - \alpha$
Ü	100	133 CTCC 133	$\alpha - \alpha$	CCATA	.0 AGCAA AGCAA	9AACC	97 ICTA ICTA 1011	JAGT	9 – 9 8 – 9 8 – 9		0 8 8 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	CAG 1 - CAG 6 - CAG 7 - CAG 8
	<u>ନ୍ଧ</u> =ନ୍ଧ	6 CAQ	1260 AAAT AAAT 1260	T 8=8 F	ATQ	CACT	° 8–8°	900 		49 	CITA HICTOR	10
148	TGTC	6 — 6 6 — 6		190 	112 607 112 112 112		CACC	3=3	830 	76 1100 1100 76	000 	\TTTG
ö	410 010 010 010 010 010	18—8 1	1 GAGT GAGT 1	δ <u>—</u> δ	ACAA	ACTT	CAAI	Ş—Ş Ş—Ş	$\mathfrak{L} = \mathfrak{L}$	\sim \sim \sim	690 	8=8
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14	G-6	CCAG	TTCC	25-52	15-51	CAGC 1	S = S	TACGG	84 64 84 84 84 84 84 84 84 84 84 84 84 84 84	70-07	CAC CAC	CAAGAG
90	142 GTG GTG 142	GA 1	CACTA	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	30 GTT 30	용감무감용	9—9 —9	G166 	AGTT		.,≥=≥.,	GA GG GG
	O ATA	1350 3AAAAT 1350	53235	CAAC	CTGA	o CCCAC CCCAC	990	92 	S = S	70 CTGGAGAAA CTGGAGAAA	700 CAGATTA: CAGATTA: CAGATTA: 700	630 630
<u></u>	6—6 6—6 0—7	CAGT	280 3AATAAAA 3AATAAAA 280	1210 1CTTAA(1CTTAA(1210	누럼드럼드) 			AAA 	TATT	
500	14. CHO	A — A	AA — AA	O ACTTTO ACTTTO	140 ACC 140	100-10		POSTTGCTTO	850 CAATTTTC CAATTTTC	78C	0-0	CAGG
	30 000	136 136 136 136 136 136 136 136	ACTG ACTG ACTG ACTG		ACC 	7 G C C C C C C C C C C C C C C C C C C	100 100 1100 100	3二3	გ_გ	3=3	710 ;aaag ;aaag 710	640 GAAG GAAG 640
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J	666 666 666 666 666 666 666 666 666 66		10-10 6-6	ନ୍ୟୁ	0 g _ g 0	1080 TACA TACA	CA 	ACC 	TCAA	GAT TAT	720 GAT 	g—g 1—g

TOIG of: abx75504 check: 5044 ABX75504.SEQ Human secreted/transmembrane protein PRO361 cDNA 26-MAR-2003 ABX75504 standard; (first CDNA; entry) from: ВP . 0

secreted/transmembrane protein 88; gene; PRO; secreted protein; PRO361 cDNA transmembrane

01-DEC-1998; 99WO-USC35108 22-JUN-1999; 99WO-USC1252 15-SEP-1999; 99WO-USC21090 30-NOV-1999; 99WO-USC28313 30-NOV-1999; 99WO-USC28301 10-DEC-1999; 99WO-USC28301 16-DEC-1999; 99WO-USC28301 16-DEC-1999; 99WO-USC365 11-FEB-2000; 2000WO-USC03565 22-FEB-2000; 2000WO-USC03441 02-MAR-2000; 2000WO-USC008439 22-MAY-2000; 2000WO-USC014042 28-JUL-2000; 2000WO-USC014042 28-JUL-2000; 2000WO-USC02710 01-DEC-2000; 2000WO-USC035678 28-FEB-2001; 2001WO-USC0520 25-MAY-2001; 2001WO-USC0520 cytostatic; antiarteriosclerotic; antiinflammatory; antidiabetic; cardiant; AIDS; acquired immunodeficiency syndrome; cancer; atherosclerosis; inflammatory disease; diabetic complication; 31-AUG-2001; 2001US-00944654 03-OCT-2002 16-SEP-1998; US2002142959-A1 98WO-US019330 organ failure protein; anti-HIV;

(GETH _ GENENTECH INC.

Gerritsen I Hillan KJ, Baker Ğ, , Botstein D, n ME, Goddard *I* J, Kljavin IJ, Þ Eaton DL, Ferrara N, Filvaroff E; A, Godowski PJ, Grimaldi JC, Gurn Napier MA, Roy MA, Tumas D, Woo Gurney AL; wood WI;

WPI; 2003-174141/17. DB; ABU55934.

New isolated PRO polypeptide and encoding nucleic acid, useful for the diagnosis and treatment of disorders associated with the PRO polypeptide, such as AIDS, cancer, atherosclerosis, inflammatory disease and diabetes.

Claim 2; Fig 31; 178pp; English.

The invention relates to an isolated PRO polypeptide (a secreted or transmembrane protein) comprising: (a) at least 80% sequence identity or positives when compared to any of 15 sequences, fully defined in the specification, lacking or with its associated signal peptide; or (b) at least 80% sequence identity to a sequence encoded by the full-length coding sequence of a DNA deposited in the American Type Culture Collection (ATCC). Also included are: (1) an isolated nucleic acid comprising: (a) at least 80% sequence identity to a nucleotide sequence that encodes a PRO protein; (b) at least 80% sequence identity to a nucleotide sequence or full-length coding sequence with any of 15 fully defined sequences of 957-3441 base pairs, given in the specification; or (c) at least 80% sequence identity to a full-length coding sequence of a DNA deposited under ATCC Accession No. 209528, 209527, 209570, 209618,

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Initial Score
Residue Identity
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABX75504 Length: 2284 September 29, 2004 14:40 Type: N Check: 5044
                                                                                                                                                                                                                                                                                                                       209621 or 209619; (2) a vector comprising the nucleic acid; (3) a host cell comprising the vector which, when cultured under conditions suitable for expression of the PRO polypeptide, produces the PRO protein; (4) a chimeric molecule comprising PRO fused to a heterologous amino acid sequence; and (5) an anti-PRO antibody. The methods and compositions of the present invention are useful for the diagnosis and treatment of disorders associated with the PRO polypeptide, such as AIDS (acquired immunodeficiency syndrome), cancer, atherosclerosis, inflammatory disease, diabetic complications, cardiac injury and organ failure. The antibodies can also be used in the different screening, therapeutic and biological assays. The present sequence is the cDNA encoding a PRO protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 2284 BP; 612 A; 576 C; 464 G; 632 T; 0 U; 0 Other;
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100%
0
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1450

1460

1470

1480

1490

	ABX64297 standard;	ard; cDNA; 2284 BP.
GACATCTAAGGATGGAACTCGGTGTCTCTTAATTCATTTAGTAACCAGAAGCCCAAATGCAATGAGTTTCTG AC	ABX64297; 26-FEB-2003 ((first entry)
·	cDNA encoding	human PRO361 polypeptide.
CTGACTTGCTAGTCGTAGTGTATTTTGAAGACAAGAAAATGCCCCCTTTTGCTTTTTTTT	Human; PRO polype genetic disorder; gene therapy; gen	<pre>polypeptide; secreted protein; transmembrane protein; iorder; antibacterial; immunosuppressive; transgenic; y; gene; ss.</pre>
	apiens.	
	103125-	A1.
TTTTGGAGAGAGAGTCTTGCTCTGTTGCCCAAGGTGGAGTAGCACGATCTCGGCCTCTCACCGCAACCC PD 1660 1670 1680 1690 1700 1710 1720 XX	-2002.	
	200	001US-00989731.
TCCGTCTCCTGGGTTCAAGCGATTCTCCTGCCTCAGCCTCCTAAGTATCTGGGATTACAGGCATGTGCCACC		97US-0049787P. 97US-0062250P. avar-1160701669
		97US-0065116P.
	199	98US-0078910P.
	199	98US-0084600P.
	199	98US-0087607P. 98US-0087609P.
	.199 .199 .199	98US-0087759P. 98US-0087827P. 98US-0088021P.
	.199 .199	98US-0088025F. 98US-0088026F. 98US-0088028F
	04-JUN-1998; 04-JUN-1998; 04-JUN-1998;	98US-0088029F, 98US-0088030F, 98US-0088033F,
	199	98US-0088326P. 98US-0088167P. 98US-0088202P.
TITLE	199	98US-0088217P. 98US-0088655P.
2160 TTCCAGA	100	98US-0088742P.
AAAGAAACAGGTTAGGACATCTAGGTTCCAATTCACATTCTTGGTTCCAGA 2110 2120 2130 2140 2150 2160	199	98US-0088826P.
	199	98US-0088876P.
TAAAATCAACTGTTAATATCAATTTCTATGTATTTCTTTTTTTT	199	98US-0089512P.
	199	98US-008953EP. 98US-008953BP.
CCAGATGTAGTTCCAATTAAATATTTGAATAATCTTTTGTTACTCAA 2240 2250 2260 2270 2280 X	-199	98US-0089599P. 98US-0089599P. 98US-0089600P.
10. US-09-944-929-82 (1-2284) ABX64297.SEQ cDNA encoding human PRO361 polypeptide. PR	18-JUN-1998; 18-JUN-1998; 18-JUN-1998;	98US-0089901P. 98US-0089907P. 98US-0089908P.
4 from: 1 to: 2284	-199 -199	98WO-US019330. 98WO-US019437. 98WO-US021141.

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01-DEC-1998;
05-JAN-1999;
08-MAR-1999;
15-SEP-1999;
15-SEP-1999;
11-DEC-1999;
11-DEC-1999;
11-DEC-1999;
11-DEC-1999;
11-FEB-2000;
12-FEB-2000;
12-FEB-2000;
12-FEB-2000;
13-FEB-2000;
14-FEB-2000;
15-MAR-2000;
15-MAR-2000;
15-MAR-2000;
17-MAY-2000;
17-MAY-2000;
11-FEB-2000;
11-FEB-2000;
11-FEB-2000;
11-FEB-2000;
11-MAY-2000;
12-MAY-2000;
12-MAY-2000;
12-MAY-2000;
13-MAY-2000;
12-MAY-2000;
12-MAY-2000;
13-MAY-2000;
13-MA
GENENTECH
                                                             98WO-US025108
99WO-US005028
99WO-US01252
99WO-US01252
99WO-US021547
99WO-US028313
99WO-US028313
99WO-US02830095
99WO-US030376
2000WO-US003365
2000WO-US003414
2000WO-US004414
2000WO-US00504414
2000WO-US0050441
2000WO-US0050441
2000WO-US0050841
2000WO-US005841
2000WO-US013705
2000WO-US013705
2000WO-US013705
2000WO-US013705
2000WO-US013705
2000WO-US013705
2000WO-US013705
2000WO-US013705
2000WO-US0332678
2001WO-US0332678
2001WO-US017806
2001WO-US017806
2001WO-US017806
2001WO-US017806
   LTD
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Novel secreted and transmembrane activity of cell expressing the pantagonists of polypeptide, and a Zhang Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton Ferrara N, Fong S, Gerber H, Gerritsen ME, Goddard A, Grimaldi JC, Gurney AL, Kljavin IJ, Napier MA, Pan J, Roy MA, Stewart TA, Tumas D, Watanabe CK, Williams PM, 2003-102117/09 N ABU14005. nd transmembrane polypeptide for modulating biological expressing the polypeptide, identifying agonists or olypeptide, and as molecular weight markers. DL; Godowski Paoni Wood WI;

짇

Claim

2

Fig

327; 649pp;

English.

The present invention relates to the isolation of novel human PRO polypeptides, and the polynuclectide sequences encoding them. The PRO polypeptides are secreted and transmembrane proteins. The PRO polypeptides are useful for detecting other PRO polypeptides, for linking biological activities of cells expressing PRO polypeptides, for modulating biological activities of cells expressing PRO polypeptides, and for for identifying agonists or antagonists. The polynucleotide sequences encoding PRO polypeptides are useful as hybridisation probes, in chromosome and gene mapping, in the generation of antisense RNA and DNA, in the preparation of PRO polypeptides, for generating transgenic animals or knockout animals, to construct hybridisation probes for mapping the gene which encodes the PRO polypeptide, and for the generation analysis of individuals with genetic disorders, in gene therapy, for chromosome identification, as chromosome markers, and for generating probes for PCR, and the polyment of the genetic gene because of the property of the generating probes for PCR, and the property of the generating probes for PCR, and the polyment of the generating probes for PCR, and the polyment of the generating probes for PCR. analysis, Southern analysis and Western analysis. probes The pr present

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Residue Gaps Initial SSSS ABX64297 Length: 2284 290 90 110 120 130 140 GCTGTTCTCGCACCTGGATGGCAGCAGAGAAATCTCATCTG GCTGTTCTCGCACCTGGATGGCAGCAGAGGAGAAATCTCATCTG GCTGTTCTCGACGCCAGAGAGAAAATCTCATCTG GCTGTTCTCGACGTCGACCTGGATGGCAGGAGGAAAATCTCATCTG 360 340 350 350 AGENTAL STATES AND AGENT AGE AAATTTAAAATGTTCCTTCGGGGGAGAAGGGAGCTTGACTTACACTTTTGGTAAATTATTTGCTTCCTGACACTA
220 230 240 250 260 270 280 sequence sequence from the Sequence Identity Score 80 300 encodes a human PRO polypeptide of the invention. Note: data for this patent was obtained in electronic format USPTO web site at segdata.uspto.gov/psipsDIDEntry.html 2284 BP; 612 A; 576 n 11 11 90 2284 100% 380 310 0 September 29, Optimized Sco Matches Conservative (100 390 320 C; 464 G; Score 110 2004 Substitutions 400 330 0 0 14:41 632 T; 0 U; 2284 2284 120 Type: N 410 340 Significance Mismatches 0 130 Other; Check: 420 n 5044 140 0.55 directly 430

0 1630 1640 1650 1650 1640 1650 1650 1650 1650 1650 1650 1650 165
1520 1530 1540 1550 1560 1570 1580 GACATCTAAGGATGGAACTCGGTGTCTCTTAATTCATTTAGTAACCAGAAGCCCAAATGCAATGAGTTTCTG [
1450 1450 1470 1480 1490 1500 AGAATCCTTTCGGAATCACTCCGCAGGAAACGTTACTCAAGACTGGATTATTTGATCAATGGGATCTATGTG
1370 1380 1390 1400 1410 1420 1430 1440 GAAAAATGGCTTCTTATCGGGTCCTTCTTGGTGTTCCTGGTGTCCTTGGTGTCCTCC
1300 1310 1320 1330 1340 1350 1360 GAAGGTAGGGAGGCCAGTCCAGGCAGTTCCTCCCAGGGCAGTGTTCCAGAAAATCAGTACGGCCTTCCATTT
1230 1240 1250 1260 1270 1280 1290 AANGTGTATAACCCTACGACTITCTATGTCAAATGTGGAGTCTTCCACTATGATAAAACTGCTTCCTGG
1160 1170 1180 1200 1210 1220 CCTACGGACTCGAAAGCCAGCTTAGAAACCATACCGTTTACAGAAATCTCAACTTAACTTTGAACACAGGG [[[[]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]
1090 1100 1150 GTTTTACACGGGCTGCGGCTACACTCCAAGCAATGGCTACAACAGCAGTTCTGACTACCACCTTTCAGGCA
1010 1020 1030 1040 1050 1060 1070 1080 CCACAGCTGGCCACCACGACCCTCACTTACCACGCTGCACCTCCACGACCCCTCATTTCTACA [
940 950 960 970 980 990 1000 ACCTCGGCTACTCCAAAGCCCGCCACCCTTCTACCCACCAATGCTTCAGTGACACCCTTCTGGGACTTCCCAG
970 980 990 910 920 930 GAAATAGCTCATCTCCTGAAAATGTGAGTGCGCTCCCAAGTACGGTGGCAGTTGCTTCTCCACATACC
800 810 820 830 840 850 860 GAAGCAAGTGCCCAGCCTCTGCTTATAAGGAAAAAAGGCCATTCTCAGAGTTCACAATTTTCCTCTGATCAA
ATCTCATGGAGAGACACACTTTCTCAGAAGTTTGGATCCTCAGATCACCTGGAGAAACTATTTAAGATGGAT

. US-09-944-929-82 (1-2284)	2170 2180 2220 2230 TAAAAATCAACTGTTATATCAACTTCTTAATGGATTTCCTTTTATATGGATTCCTTTAAAACTTATT	2090 2100 2110 2120 2130 2140 2150 2160 TCAACTGGCTTTATGCAAAGAAACAGGTTAGGACATCTTCAATTCATTC	2020 2030 2040 2050 2060 2070 2080 2080 2080 2080 2080 2080 208	1950 2010 2010 CTTCTGTTTTATCTTTTGGTTTTTGGAAGGAATGAAGTGGGAACCAAATTAGGTAATTTTGGTTATCTGT [1880 1890 1900 1910 1920 1930 1940 TGACCTAGTGATCCACCCTCCTCGGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACCACAGCTGGCCC	1810 1820 1830 1840 1850 1860 1870 ACACCTGGGTGATTTTTGTATTTTTAGTAGACGCGGGTTTTCACCATGTTGGTCAGGCTGGTCTCAAACTCC	1730 1740 1750 1760 1780 1780 1800 TCCGTCTCCTGGGTTCAAGCGATTCTCCTGCCTCAAGCCTCCTAAGTATCTGGGATTACAGGCATGTGCCACC	1660 1670 1680 1690 1700 1710 1720 1710 1710 1710 1710 171	
		2170 2180 2290 2210 2210 2220 2230 TAAAATCAACTATTCTAATGAATTTCTAATGGATTTCTTTTATATAGGATTCCTTTAAAACTTATT	0 0	2020 2030 2040 2050 2060 2070 2080 CTCTAAAATATTACCTAAAAACAAAGCTCTAAGGTAATAAGTAATAAGTAATAAGTAATAAGTAATAAAGTAATAA	1950 CCTTCTGTTTANGTTTGGTATTTGGGAAGGAATGAAGTGGGAACCAAATTAGGTAATTTTGGGTT CCTTCTGTTTTANGTTTTGGTTTTTGAGAAGGAATGAAGTGGGAACCAAATTAGGTAATTTTGGGTT CCTTCTGTTTTANGTTTTGGTTTTTGAGAAGGAATGAAGTGGGAACCAAATTAGGTAATTTTGGGTT 1950 1950 1960 2020 2030 2040 2050 2070 2080 CTCTAAAATATTAGCTAAAAACAAAGCTCTATGTAAAGTAATAAAGTATAAAGTATAATTGCCATATAAATTT [1880 1890 1900 1910 1920 1930 1940 1940 1950 1950 1950 1950 1950 1950 1950 195	1810 1820 1840 1850 1860 1860 1860 1860 1860 1870 1880 1890 1890 1890 1890 1990 1990 199	730 730 770 770 770 770 770 770 770 770	1660 1670 1777 1777 1777 1777 1777 1777

11. US-09-944-929-82 (1-2284)
AAC58593.SEQ Human PRO361 protein UNQ316 encoding cDNA SEQ ID N TOIG of: aac58593 check: 6732 from: 1 to: 2418

AAC58593 standard; cDNA; 2418 BP.

AAC58593;

SX SX FX SX SX S 29-JAN-2001 (first entry)

Human PRO361 protein UNQ316 encoding cDNA SEQ ID NO:71.

Human; immune related disease; diagnosis; antiinflammatory; cardiant;

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23 MAR-1999
12 - APR-1999
20 - APR-1999
20 - APR-1999
21 - APR-1999
22 - JUN-1999
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                                                                                        Ashkenazi AJ,
Kabakoff RC,
Stewart TA,
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                                          WPI; 2000-572271/53.
P-PSDB; AAB33428.
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99US-0123618P
99US-01235775P
99US-0125775P
99US-0131445P
99US-0131445P
99US-01342877P
99US-01342877
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99US-0144758
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99US-0145698P
99US-01475898
99US-016222P
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Lu Y, I
Tumas D,
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                                                                                                                                                        INC.
                                                                                        KP, Goddard A, Gurney AL, Heb
Pan J, Pennica D, Shelton DL,
, Watanabe CK, Wood WI, Yan M;
                                                                                                        Hebert C,
DL, Smith
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                                         proteins, anti-PRO antibodies, agonists and antagonists are useful for cureating and diagnosing immune related disorders. The disorders are selected from systemic lupus erythematosus, rheumatoid arthritis, costeoarthritis, juvenile chronic arthritis, spondyloarthropathies, costeoarthricis, idiopathic inflammatory myopathies, Sjogren's syntemic vasculitis, sarcoidosis, autoimmune haemolytic anaemia, autoimmune thrombocytopaenia, thyroiditis, diabetes mellitus, immune-mediated renal disease, demyelinating diseases, inflammatory bowel disease, gluten-sensitive enteropathy and Whipple's disease, autoimmune or immune-mediated skin diseases, allergic diseases, inflammatory bowel diseases of the lung, and transplantation associated diseases including graft rejection and graft-versus-host-disease. AAC5839 to AAC58578 crepresent PCR primers and hybridisation probes used in the isolation of thuman PRO polynucleotide and protein sequences given in the creening thromatory in the present human PRO polynucleotide and protein sequences given in the creening to the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention describes sixty four be used in the treatment of immune related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    arthritis, osteoarthritis, thyroiditis
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  BP;
657 A; 606
C; 481
<u>ن</u>
  674
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  <u>.</u>.
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ses. The human PRO
     0
Other;
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Gaps Residue Initial AAC58593 Length: 2418 e Identity = Score 160 2284 100% 0 September 29, 2004 14:42 Type: N Check: Optimized Score = Matches Conservative 180 Substitutions 2284 2284 Significance = 0.55
Mismatches = 0 6732

Sixty four PRO polypeptides, useful in the diagnosis and treatment of immune related disorders, e.g. systemic lupus erythematosis, rheumatoid

1300 1310 1320 1330 1340 1350 1360 GAAGGTAGGGAGGCCAGTCCAGGCAGTTCCCAGGGCAGTGTTCCAGGAAAATCAGTACGGCCTTCCATTT	1230 1240 1250 1260 1270 1280 1290 AATGTGTATAACCCTACTGCACTTTCTATGTCAAATGTGGAGTCTTCCACTATGAATAAAACTGCTTCCTGG	1160 1170 1180 1200 1210 1220 CCTACGGACTCGAAGGCATTAGAAACCATACCATTCAGAAATCTCCAACTTTAACACAGGG	1090 1100 1110 1130 1130 1140 1150 GTTTTTACACGGGCTGCGGCTACACTCCAAGCAATGGCTACAACAGCAGTTCTGACTACCACCTTTCAGGCA	1010 1020 1030 1040 1050 1060 1070 CCACAGCTGGCCACCACCACCACCTGTAACCACTGTCACTTCTCAGCCTCCACGACCCTCATTTCTACA [940 950 960 970 980 990 1000 ACCTCGGCTACTCCAAAGCCCGCCACCCTTCTACCCACCC	870 880 890 910 920 930 GAAATAGCTCATCTGCTGAAAATGTGAGTGCGCTCCCAGCTACGGTGGCAGTTGCTTCTCCACATACC	800 810 820 830 840 850 GAAGCAAGTGCCCAGCTCCTTGCTTATAAGGAAAAAGGCCATTCTCAGAGTTCACAATTTTCCTCTGATCAA	730 740 750 760 770 780 790 ATCTCATGGAGACACACTITCTCAGAAGITIGGATCCTCAGATCACCTGGAGAACTATTTAAGATGGAT	650 660 670 680 700 710 720 TTACATGGCCAATTTCACAAGCAGTCACTCCCCTAGCCCATCATCACAGATTATTCAAAGCCCACCGAT	580 590 600 610 620 630 640 AGGATAATTACAGATTTTCCATCTTTGACCAGAAATTTTGCCAAGGCCAAGAGTTACCCCAGGAAGATTCTCTC	510 520 530 540 550 550 570 AACTGCTACCTATTTTCTGTCCCAACGAGGAAGCCTGTCCATTGAAACCAGCAAAAGGACTTATGAGTTAC

2090 2100 2110 2120 2130 2140 2150 2160 TCAACTGGCTTTTATGCAAAGAAACAGGTTAGGACATCTAGGTTCCAATTCACATTCTTGGTTCCAGA	2020 2030 2040 2050 2060 2070 2080 CTCTARAATATTAGCTARAAAGTCTCTATGTAAAGTATAAAGTATAATTGCCATATAAATTTCAAAAT	1950 1960 1970 2010 2000 2010 CCTTCTGTTTTATGTTTTGAGAAGGAATGAACTGGGAACCAAATTAGGTAATTTTGGGTAATCTGT	1880 1890 1910 1920 1930 1940 TGACCTAGTGATCCACCCTCCGGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACCACAGCTGGCCC	1810 1820 1830 1840 1850 1860 1870 ACACCTGGGTGATTTTTGTATTTTTAGTAGAGACGGGGTTTCACCATGTTGGTCAGGCTGGTCTCAAACTCC	1730 1740 1750 1760 1770 1780 1790 1800 TCCGTCTCCTGGGTTCAAGCGATTCTCCTGCCTCAAGCATCTGGGATTACAGGCATGTGCCACC	1660 1670 1680 1690 1700 1710 1720 TTTTGGAGACAGAGTCTTGCTCGTTGCCCAGGCTGGAGTGCAGTAGCACGATCTCGGCTCTCACCGCAACC	1590 1600 1610 1620 1630 1640 1650 CTGACTTGCTAGTCTTAGCAGGAGGTTGTATTTTGAAGACAGGAAAATGCCCCCTTCTGCTTTTTTTT	1520 1530 1540 1560 1570 1580 GACATCTAAGGATGGAACTCGGTGTCTCTTAATTCATTTAGTAACCAGAAGCCCAAATGCAATGAGTTTCTG	1450 1460 1470 1480 1490 1500 1510 AGAAICCTITCGGAATCACTCCGCAGGAAACGTTACTCAAGACTGGATTATTTGATCAATGGGATCTATGTG	1370 1380 1390 1400 1410 1420 1430 1440 GAAAAATGGCTTCTTATCGGGTCCCTGCTCTTTGGTGTCCTGGTCCTGGTGATAGGCCTCGTCCTCGTGGGT

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TOIG of: aac59840
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29-NOV-1999;
15-FEB-2000;
antiinflammatory, antianaemic, nootropic, antiparkinsonian, cerebroprotective, haemostatic, vulnerary, cycostatic, antipsoriatic, antibacterial, virucide, and fungicide activity. The proteins and nucleotide sequences are useful as nutritional sources or supplements and in research. The proteins are useful for treating immune deficiency and disorders, which may be genetic or resulting from infections, autoimmune disorders such as multiple sclerosis, systemic lupus erythmatosus, rheumatoid arthritis, and for treating myeloid or lymphoid cell deficiencies such as anaemias by regulating haematopoiesis. The proteins are also useful in compositions for bone, cartilage, tendon, ligament
                                                                                                                                                                                     This invention relates to 59 human secreted proteins and the nucleotide sequences encoding them. Sequences AAC59788-C59846 and AAB34667-B34745 represent the proteins and their encoding nucleotide sequences, and sequences AAB34746-B34771 represent fragments of the proteins. Probes for the DNA sequences are represented by sequences AAC59847-C59596. The proteins exhibit neuroprotective, dermatological, immunosuppressive, proteins exhibit neuroprotective, dermatological, immunosuppressive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Secreted protein; human; autoimmune disorder; multiple sclerosis; ulcer; systemic lupus erythematosus; rheumatoid arthritis; anaemia; stroke; haematopoiesis regulation; tissue regrowth; wound healing; haemophilia; Alzheimer's disease; Parkinson's disease; Shy-drager syndrome; cancer; contraceptive; infection; growth inhibition; hyperproliferative disorder;
                                                                                                                                                                                                                                                                                                                                                                 Novel proteins and polypeptides useful for the treatment of e.g multiple sclerosis, systemic lupus erythmatosus, rheumatoid arthritis, cancer, Alzheimer's disease, Parkinson's disease, stroke, anemia and ulcers.
                                                                                                                                                                                                                                                                                                                               Claim 114; Page 453; 493pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-MAR-1999;
17-AUG-1999;
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99US-0124916P.
99US-0149639P.
99US-0157247P.
99US-0167824P.
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Initial Score = Residue Identity = Gaps = =
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cc and/or nerve tissue growth or regeneration, for wound healing, tissue crepair and replacement and in the treatment of wounds, incisions and culcers. Other uses include in the treatment of central and peripheral cc ulcers. Other uses include in the treatment of central and peripheral cc diseases and Shy-Drager syndrome, and mechanical and traumatic disorders, such as spinal cord disorders, head trauma and stroke. The proteins may class be used as a contraceptive, and for treating cogulation disorders such as haemophilias. The protein and nucleotide sequences with cadherin cactivity are useful for treating cancer. Other uses for the protein cc include for inhibiting the growth, infection of unction of, or killing, cc infectious agents such as bacteria, virus, fungi and other parasites, for ceffecting bodily characteristics such as height, weight, hair colour, cc effecting biorhythms or cardiac cycles or rhythms, effecting metabolism, anabolism, processing, utilization, storage or elimination of dietary fat, lipid, protein, carbohydrate, vitamins, minerals, cofactors, ceffecting behavioural characteristics, providing analgesic effects and corrected the protein and protein and protein of contents of the protein of the protein and protein cofactors, contents and protein contents and con
AACTCAAGAAGACTGCATTAATTCTTGCTGTTCAACAAAAAACATATCAGGGGACAAAGCATGTAACTTGAT
                                                                                                                                                                                                                                                                                                       260 280 310 320 THACACTITGGTAATAATITGCTTCCTGACACTAAAGGCTGTCTGCTAGAATTGCCTCAAAAAGAGTCTTTACACTTTGGTAATAATTTGCTTCCTGACACTAAGGCTGTCTGCTAGAATTGCCTCAAAAAGAGTCTTTACACTTTGGTAATAATTTGCTTCCTGACACTAAGGCTGTCTGCTAGTCAGAATTGCCTCAAAAAGAGTCT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  for treating hyperproliferative disorders such as psoriasis
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Matches
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1340 1350 1360 1370 1380 1390 1400 CAGTGTTCCAGAAAATCAGTACGGCCTTCCATTTCAAAAATGGCTTCCTTATCGGGTCCCTGCTCTTTGGTGT	1270 1280 1290 1300 1310 1320 1330 GGAGTCTTCCACTATGAATACTGCTTCCTGGGAAGGTAGGGAGGTCCAGGCAGTTCCTCCCAGGG	1200 1210 1220 1230 1240 1250 1260 TACAGAAATCTCCAACTTAACCATGAACACAGGGAATGTGTATAACCCTACTGCACTTTCTATGTCAAATGT	1120 1130 1140 1150 1160 1170 1180 1190 TACAACAGCAGTTCTGACTACCACCTTTCAGGCACCTACGGACTCGAAAGGCAGCTTAGAAACCATACCGTT	1050 1060 1070 1080 1090 1100 1110 CACTTCTCAGCCTCCCACGACCCTCATTTCTACAGTTTTTACACGGGCTAGGGCTACACTCCAAGCAATGG	980 990 1000 1010 1020 1030 1040 CAATGCTTCAGTGACACCTTCTGGGACTTCCCAGCCACAGCTGGCCACCACAGCTCCACCTGTAACCACTGT	910 920 970 970 970 970 970 970 970 970 970 97	840 850 860 870 880 900 CCATTCTGAGAGTTCACAATTTTCCTCTGATCAAGAAATAGCTCATCTGCTGCTGAAAATGTGAGTGCGCT	760 770 780 790 800 810 820 830 CTCAGATCACCTGGAGAAACTATTTAAGATGGAGGAGCAAGTGCCCAGCTCCTTGCTTATAAGGAAAAAGG	690 700 710 720 730 740 750 CCATCATCACACACACATTACTCAAAAGCCCACCGATATCTCATGGAGACACACTTTCTCAGAAGTTTGGATC [620 630 640 650 660 670 680 GCCAAGCCAAGAGTTACCCCCAGGAAGATTCTCTCTTACATGGCCAATTTTCACAAGCAGTCACTCCCCTAGC	550 560 570 580 590 600 610 TCCATTGADACCAGCAADAGGACTTATGAGTTACAGGATTATTACAGATTTTCCATCTTTGACCAGAAATTT
2210 2210 2220 2230 2240 2250 2260 2260 2270 2260 2270 2280 2270 2280 2270 2280 2270 2280 2270 2280 2270 2280 X	2130 2150 2150 2170 2180 2190 2190 2190 2190 2190 2190 2190 219	2060 2070 2080 2100 2110 2120 GTAATAAAGTATAATTGCCATATAAAATTTCAAAATTCAACTGGCTTTTTATGCAAAGAACAGGTTAGGACAT	1990 2000 2010 2020 2030 2040 2050 GTGGGAACCAAATTAGGTAAATTTTTTTTTTTTTTTTTT	1910 1920 1930 1940 1950 1960 1970 1980 CTGGGATTACAGGCATGAGCCACCACCAGCTGGCCCCCTTCTGTTTTATGTTTTGAGACAGGAATGAA	1840 1850 1900 1900 1900 1900 1900 1900 1900 19	1770 1780 1800 1810 1830 1830 1830 1830 1830 18	1700 1710 1720 1730 1750 1750 1760 AGTGCAGTAGCAGGATCTCGGGCTCTCACCGTCCTCGTGGTTCAAGCCATTCTCTCCTCCTCCTCCTCCTCCTCCTCCTCCTCCTC	1630 1640 1650 1670 1690 ACAGGAAAATGCCCCCTTCTGCTTTCC-TTTTTTTTTTTT	TAGTAACCAGAAGCCCAATGCATTTCTGCTGACTTGCTAACCAGGAGGTTGTATTTGAAG	1480 1590 1590 1590 1590 1590 1590 1590 159	1410 1420 1430 1440 1450 1460 1470 CCTGTTCCTGGTGATAGGCCTCGTGCTCCTGGGTAGAATCCTTCCGGAATCACTCCGCAGGAAACGTT

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TOIG of: aah18096
                         US-09-944-929-82 (1-2284)
AAH18096.SEQ Human cDNA s
                                                                                             2320
check: 2357
                         sequence
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SEQ ID NO:17949

26-JUN-2001 (first entry)

AAH18096 standard; cDNA;

2297

ΒP

CDNA sequence SEQ ID NO:17949

Homo sapiens Human; primer; detection; diagnosis; antisense therapy; gene therapy; ss

29-JUL-1999; 99JF-00300253. 27-AUG-1999; 99JF-00300253. 11-JAN-2000; 2000JF-00118776. 02-MAY-2000; 2000JF-00183767. 09-JUN-2000; 2000JF-00241899. 07-FEB-2001 28-JUL-2000; 2000EP-00116126

EP1074617-A2

တ Isogai T, Nis , Sugiyama T, Nishikawa T, T, Wakamatsu A, Hayashi K, ! A, Nagai K, Saito K, C, Otsuki Yamamoto

(HELI-) HELIX RES INST.

WPI; 2001-318749/34.

Primer sets for synthesizing polynucleotides, particularly the 5602 fullength cDNAs defined in the specification, and for the detection and/or diagnosis of the abnormality of the proteins encoded by the full-length particularly the 5602 full-1 for the detection and/or

Claim 8; SEQ ID NO 17949; 2537pp + Sequence Listing; English

The present invention describes primer sets for synthesising 5602 full-length cDNAs defined in the specification. Where a primer set comprises: CC (a) an oligo-dT primer and an oligonucleotide complementary to the complementary strand of a polynucleotide which comprises one of the 5602 nucleotide sequences defined in the specification, where the coligonucleotide comprises at least 15 nucleotides; or (b) a combination of an oligonucleotide comprises at place of the complementary to the complementary strand of a polynucleotide which comprises a 5'-end sequence complementary to a polynucleotide which comprises a 5'-end sequence and an oligonucleotide comprises a 3'-end sequence complementary to a polynucleotide which comprises at least 15 nucleotides; or (b) a combination of the 5'-end sequence is sequence, where the oligonucleotide comprises at least 15 nucleotides and the combination of the 5'-end sequence is selected from those defined in the specification. The primers are useful for synthesising polynucleotides, gene therapy. The primers are useful for synthesising polynucleotides, particularly full-length cDNAs. The primers are also useful for the detection and/or diagnosis of the abnormality of the proteins encoded by the full-length cDNAs. The primers allow obtaining of the full-length cDNAs easily without any specialised methods. AAH03166 to AAH13628 and COMAS easily without any specialised methods. AAH03166 to AAH13632 represent colligonucleotides, all of which are used in the exemplification of the COMAS collections.

Sequence 2297 BP; 613 A; 585 ü 473 <u>ი</u> 626 H 0 U; 0 Other

> Initial Score = Residue Identity = Gaps = = AAH18096 Length: 2297 September 29, 2004 14:43 Type: N 400 AACCACAAAACCCGCCAGGCGGTGCGGGAGCTGCGGAGCTCCGCGGTGCTGGGGAGCCCCGCGG 10 20 30 X 40 50 TATCCTTGACCTTTGAAGACCAAAACTAAACTGAAATTTAAAATGTTCTTCGGGGGAGAAGGGAGCTTGACT 220 270 280 270 280 ATCTTCGACACTCGAAAAAAAACAGCTAGAACCCAACTGCTACCTATTTTCTGTCCCAACGAGGAAGCCTGT 190 200 210 220 230 TARREST TARABATETT ARABATETT CTTCGGGGGAAAAGGGAAGCTTGACT GAAGATGTTGTCATTGACATCCAGTCATCTCTTTCTAAGGGAATCAGAGGCAATGAGCCCGTATATACTTCA GAAGATGTTGTCATTGACATCCAGTCATCTCTTTCTAAGGGAATCAGAGGCAATGAGCCCGTATATACTTCA GGATTCGCCGGTCCTTCCCGCGGGCGCGACAGAGCTGTCCTCGCACCTGGATGGCAGCAGGGGCGCCGGGGT 150 80 370 340 270 160 560 450 490 1833 99**%** 1 380 350 280 Optimized Score = 2258
> Matches = 2259
> Conservative Substitutions 170 570 100 460 500 390 720 360 290 180 580 110 470 510 400 760 370 300 190 590 480 120 520 410 770 Significance Mismatches 740 380 310 200 600 130 490 Check: 530 420 390 320 IJ 2357 610 -0.89 500 540 430 40

1630 1640	1560 AGTAACCAGAAGCCCAAATGC 	1480 1490 1500 AGACTGGATTATTGATCAATGGG	1410 1420 CTGTTCCTGGTGATAGGCCTC	1340 1350 AGTGTTCCAGAAATCAGTAC	1270 1280 GAGTCTTCCACTATGAATAAACTGCTTC	1210 ACAGAAATCTCCAACTTAACT	1120 1130 1140 1150 1160 ACAACAGCAGTTCTGACCTACCACCTTTCAGGCACCTACGGACTCG	1050 1060 10 ACTTCTCAGCCTCCCACGACC	980 990 AATGCTTCAGTGACACCTTCT AATGCTTCAGTGACACCTTCT AATGCTTCAGTGACACCTTCT 1010 1020 103	910 920 CCAGCTACGGTGGCAGTTGCTTG	840 CATTCTCAGAGTTCACAATTT	TCAGATCACCTGGAGAAACTATTTA CAGATCACTTGGAGAAACTATTTA 800 810
1650	1580 PAATGAGTTTCTG PAATGAGTTTCTG	1510 ATCTATGTG ATCTATGTG	1440 STCCTCCTGGGN	1360 13 ACGGCCTTCCATTT ACGGCCTTCCATTT ACGGCCTTCCATTT 390 1400	1290 CTGCTTCCTGG CTGCTTCCTGG	1210 1220 1230 AACTTAGACTTTGAACACAGGGAATGTGTATAAAACACAGGGAATGTGTATAAAACACAGGGAATGTGTATAAAACACAGGGAATGTGTATAAAACACAGGGAATGTGTATAAAACACAGGGAATGTGTATAAAACTTGAACACAGGGAATGTGTATAAAACTAACT	1150 CCTTTCAGGCA CCTTTCAGGCA 1180	1080	1000 10: TCTGGGACTTCCCAG! TCTGGGACTTCCCAG	930 TICCACATA TICCACATA	860 CTGATCA CTGATCA	TTAAGATGGAT
1660 1	1590 CTGACTTGCTAG CTGACTTGCTAG CTGACTTGCTAG	1520 GACATCTAAGG 1550	1440 1450 CTGGGTAGAATCCTTTCC	1370 ATTTGAAAAATGGCTT 	1300 TCCTGGGAAGGTAGGGAGGCCAGTC TCCTGGGAAGGTAGGGAGGCCAGTC TCCTGGGAAGGTAGGGAGGCCAGTC 1330 1340 131	1230 AATGTGTATAAC AATGTGTATAAC 260 127	1160 CCTACGGACTCG CCTACGGACTCG	1080 1090 CTACAGTTTTTACACGGG	1010 1020 1030 CCCACCACAGCTGGCCACCACACCTCACCTGGCCACACACCTCACACCTGGCCACACACCTCCACCTGCCACCACCACCACCTGCACCACCTGCACCACCACCACCACCACCTGCACCACCACCACCACCACCACCACCACCACCACCACCAC	940 940 CCACCTCGGCTACT 	870 AGAAATAGCTCATCTGC	**AAGATGAATGAAGTAGCCCAGCTCCTT
670 16	1600 1610 TCTTAGCAGGAGGI	1530 TGGAACTCGGT TGGAACTCGGT	0 1460 TCGGAATCACTCCGC TCGGAATCACTCCGC TCGGAATCACTCCGC	1380 GCTTCTTATCGGGTC GCTTCTTATCGGGTC 0 1420	10 132 IGCCAGTCCAGG GCCAGTCCAGG 1350	1240 TAACCCTACTGCACT TAACCCTACTGCACT 1270 1280	117 AAAGG AAAGG 200	1100 GCTGCGGCTAC CGCTGCGGCTAC	1030 ACCACAGCTCC ACCACAGCTCC 1060	950 960 ACTCCAAAGCCCGCCACC	TGCCTC	
80 169	1620 GGTTGTATTTTG: GGTTGTATTTTG: 1650	1540 TCTCTTAATT STCTCTTAATT	1470 AGGAAACGTT AGGAAACGTT	1390 ATCGGGTCCCTGCTCTTTGGT	1320 CCAGGCAGTTCCTCCA CCAGGCAGTTCCTCCA	1250 'TGCACTTTCTATGTCAAATGT TGCACTTTCTATGTCAAATGT 1 1280 1290	1180	1110 PACTCCAAGCAATO	IO40 FAACCA 	0 970 CACCCTTCTACCO caccCTTCTACCO	890 9 \$AAAATGTGAGTG \$AAAATGTGAGTG \$AAAATGTGAGTG 930	3CTTATAAGGAAA 3CTTATAAGGAAA 850 86
0	20 GAAGA GAAGA	1550 CATTT CATTT	ACTCA ACTCA 510	GTGTC GTGTC 1440	AGGGC AGGGC	60 ATGTG ATGTG	1190 CGTTT CGTTT	TGGCT TGGCT	CTGTC CTGTC	CCACC CCACC	CGCTC	AAGGC

2280 CTTTTGTTACTCAA	2130 2140 2150 2160 2170 2180 2190 2190 2190 2190 2190 2190 2190 219	2060 2070 2080 2090 2100 2120 TARTANACTATAATTGCAATATTCAAATTCCAAACTGGCTTTTATGCAAAGAAACAGGTTAGGGACATC	1990 2000 2010 2010 2020 2030 2040 2050 TGGGAACCAAATTAGGTAAATTTTTGGGTAATCTGTCTCTAAAATATATTAGGTAAACAAAGCTCTATGTAAAG	1920 1930 1940 1950 1960 1970 1980 TGGGATTACAGGCATGAGCCACCAGCCTGGCCCCCTTCTGTTTTATGTTTTGAGAAGGAATGAAG	1840 1850 1860 1870 1880 1900 1910 TITCACCATGTTGGTCAGGCTGGTCTCAAACTCCTGGCCTAGTGATCCACCCTCCTGGGCCTCCCAAAGTGC
		2130 2140 2150 2160 2170 2180 2190 2190 TAGGTTCCAATTCATCATCTTGGTTCCAGATAAAATCAACTGTTTATATCAATTTCTAATGGATTTGC TAGGTTCCAATTCATCACATTCTTGGTTCCAGATAAAATCAACTGTTTATATCAATTTCTAATGGATTTGC TAGGTTCCAATTCATTCACATTCTTGGTTCCAGATAAAATCAACTGTTTATATATCAATTTCTAATGGATTTGC TAGGTTCCAATTCATTCACATTCTTGGTTCCAGATAAAATCAACTGTTTATATATCAATTTCTAATGGATTTGC 2170 2180 2290 2210 2220	2060 2070 2080 2090 2100 2120 TAATAAAGTATAATTCAAAATTCAAAATTCAACTGGCTTTATGCAAAGAAACAGGTTAGGAATC	1990 2000 2010 2020 2030 2040 2050 TGGGAACCAAATTAGGTAATTTTGGGTAAAATATTAGCTAAAAATATTAGCTAAAAATTTTGGTAAAATTTTGGTAAAATATTTAGCTAAAAATATTAGCTAAAAACAAAGCTCTATGTAAAG	1920 1930 1940 1950 1960 1970 1980 1960 1970 1980 1970 1980 1970 1980 1970 1980 1970 1980 1970 1980 1970 1980 1970 1980 1970 1980 1970 1980 1970 1980 1970 1980 1970 1980 2000 2010 2010 2020 2030 2040 2050 1950 1980 1990 2000 2010 1980 1990 2000 2010 2010 1980 1990 2000 2010 2010 1980 1990 2000 2010 1980 1990 2000 2010 2010 1980 1990 2000 2010 1980 1990 2000 2010 1990 2000 2010 1990 2000 2010 1990 2000 2010 1990 2000 2010 1990 2000 2010 1990 2000 2010 1990 2000 2010 1990 2000 2010 1990 2000 2010 1990 2000 2010 1990 2000 2010 1990 2000 2010 1990 2000 2010 201
1840 1850 1860 1870 1890 1990 1990 1990 1990 1990 1990 199	1840 1850 1860 1870 1890 1900 1910 TTTCACCATGTTGGTCAGGCTGGTCCAAACTCCTGACCTAGTGATCCACCCTCCTCGGCCTCCCAAGTGC [1840 1850 1860 1870 1890 1900 1910 TTTCACCATGTTGGTCAGGCTGGTCCAAACTCCTGACCTAGTGATCCACCCTCCTCGGCCTCCCAAGTGC	1840 1850 1860 1870 1880 1900 1910 TTTCACCATGTTGGTCAGGCTGGTCTCAAACTCCTGACCTAGTGATCCACCCTCCTCGGCCTCCCAAAGTGC	1840 1850 1860 1870 1900 1910 TTTCACCATCTTGGTCAGGCTGGTCTCAAACTGCTTGATCCACCCTCCTCGGCCTCCCAAAGTGC [
1770 1780 1790 1890 1810 1820 1830 TCCTAAGTATCTGGGATTACAGGCATGTGCCACCACACCTGGGTGATTTTTTAGTAGACAGGGGGGGG	1770 1780 1790 1800 1810 1820 1830 1810 1820 1830	1770 1780 1890 1800 1810 1820 1830 TCCTAAGTATCTGGGATTACAGGCATGTGCCACCACCACCTGGGTGATTTTTGTATTTTAGTAGAGACGGG	1770 1780 1790 1800 1810 1820 1830 TCCTAAGTATCTGGGATTACAGGCATGTGCCACCACCACCTGGGTGATTTTTGTATTTTTAGTAGAGACGGG	1770 1780 1790 1800 1810 1820 TCCTAAGTATCTGGGATTACAGGCATGTGCCACCACCCTGGGTGATTTTTGTATTTTAGTAGAGACGGGG	1770 1780 1790 1800 1810 1820 1830 TCCTAAGTATCTGGGATTACAGGCATGTGCCACCACCACCACGGTGATTTTTGTATTTTTAGTAGAGACGGGG
1700	1700 1710 1720 1730 1740 1750 1760 GTGCAGTAGCACCATCTCGGCTCTCAGGCAATTCTCAGGCATTCTCAGCCTCGGTTTCAAGGCAATTCTCCTGGCTTCAGCCTCGGTTTCAAGGCAATTCTCCTGCCTCAGCCC 1730 1740 1750 1760 1770 1800 1790 1800 1770 1780 1790 1800 1770 1800 1790 1800 1770 1800 1770 1800 1790 1800 1770 1780 1790 1800 1800 1770 1780 1790 1800 1800 1800 1800 1800 1800 1800 18	1700 GTGCAGTAGCACGATTCTCGGCTCTCACCGCACCTCCTCGGTTCTAAGCGATTCTCAAGCGCTCTCACCGCACCTCTCGGCTCTCAAGCGATTCTCAAGCGATTCTCAAGCGCTCTCAGCCCTCTGGGTTCAAGCGATTCTCAAGCGCTCTCAGCCCTCTGGCTCTCAAGCGATTCTCAAGCGATTCTCCTGCCTCAGCCCTCTCAGCCCTCTCAGCCATTCTCAAGCGATTCTCAAGCGATTCTCAAGCCATTCTCCTGCCTCAGCCCTCTCAGCCTTCAAGCAATTCTCTCCTCGCCTCAGCCCTCAGCCCTCAGCCATTCTCAAGCCATTCTCTCCTCCTCCCTC	1700 GTGCAGTAGCACGATCTCGGCTCTCACCGCACCTCCTCGTCTCAAGCGATTCTCAAGCGCTCTCAAGCGATCTCAAGCGATCTCGGCTCTCACCGCACCTCCTGCTCCTCAAGCGATTCTCCTCCTCCCTC	1700 GTGCAGTAGCACGATCTCGGCTCTCACCGCAACCTCCGTCTCCTGGGTTCAAGCGATTCTCCTGCCTCAGCCC [1700 1710 1720 1730 1740 1750 1760 GTGCAGTAGCACGATCTCGGCTCTCACCGCAACCTCCGTCTCCTGGGTTCAAGCGATTCTCCTGCCTCAGCC [

14. US-09-944-929-82 (1-2284) AAH13971.SEQ Human cDNA sequence SEQ ID NO:11027.

TOIG of: aah13971 check: 7816 from: 1 to: 2221

D AAH13971 standard; cDNA; 2221 BP.

AC AAH13971;

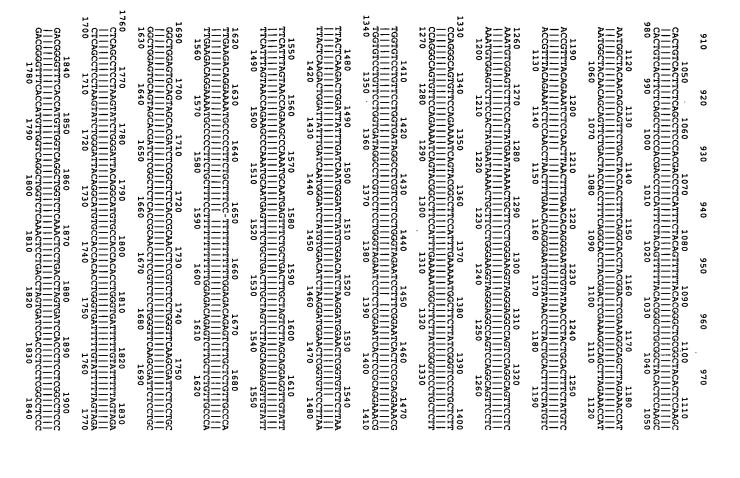
DT 26-JUN-2001 (first entry)

DE Human cDNA sequence SEQ ID NO:11027.

XX
Human; primer; detection; diagnosis; antisense therapy; gene therapy; ss.

OS Homo sapiens.

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Initial Score
Residue Identity
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                                                                                                                                                                                                                                                      30 20 30 GCTTGCTAACCACAAAACCCGCCAGGCCGGTGCGGAGCCTGCGGAGCCTGCCGGAGACC
CCGGGGTCCTCTCGACGCCAGAGAGAAATCTCATCATCTGTGCAGCCTTCTTAAAGCAAACTAAGACCAGAG
                                                                                            CCCGCGCGGATTCGCCGGTCCTTCCCGCGGGCGCGACAGAGCTGTCCTCGCACCTGGATGGCAGCAGGGGCG
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27-AUG-1999;
11-JAN-2000;
02-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      complementary strand of a polynucleotide which comprises a 5'-end sequence and an oligonucleotide comprising a sequence complementary to a polynucleotide which comprises a 3'-end sequence, where the oligonucleotide comprises at least 15 nucleotides and the combination of the 5'-end sequence/3'-end sequence is selected from those defined in the specification. The primers ests can be used in antisense therapy and in gene therapy. The primers are useful for synthesising polynucleotides, particularly full-length cDNAs. The primers are also useful for the detection and/or diagnosis of the abnormality of the proteins encoded by the full-length cDNAs. The primers allow obtaining of the full-length cDNAs easily without any specialised methods. AAH03166 to AAH13628 and AAH13633 to AAH18742 represent human cold sequences; and AAH13639 to AAH13632 represent human anino acid sequences; and AAH13639 to AAH13632 expresent human anino acid sequences; and AAH13639 to AAH13632 expresent human anino acid sequences; and AAH13639 to AAH13632 expresent human anino acid sequences; and AAH13639 to AAH13632 expresent human anino acid sequences; and AAH13639 to AAH13632 expresent human anino acid sequences; and AAH13639 to AAH13632 expresent human anino acid sequences; and AAH13639 to AAH13632 expresent human anino acid sequences; and AAH13639 to AAH13632 expresent human anino acid sequences; and AAH13639 to AAH13632 expresent human anino acid sequences; and AAH13639 to AAH13632 expresent human anino acid sequences; and AAH13639 to AAH13632 expresent human anino acid sequences; and AAH13639 to AAH13632 expresent human anino acid sequences; and AAH13639 to AAH13632 expresent human anino acid sequences; and AAH13639 to AAH13632 expresent human anino acid sequences; and AAH13639 to AAH13632 expresent human anino acid sequences; and AAH13639 to AAH13632 expresent human anino acid sequences; and AAH13639 to AAH
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length cDNAs defined in the specification, and for the detection and/or
diagnosis of the abnormality of the proteins encoded by the full-length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention describes primer sets for synthesising 5602 full-
length cDNAs defined in the specification. Where a primer set comprises:
(a) an oligo-dT primer and an oligonucleotide complementary to the
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, Sugiyama T, Wakamats
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; 99JP-00300253.
; 2000JP-00118776.
; 2000JP-00183767.
; 2000JP-00241899.
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95%
103
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2173
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C, Otsuki
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2060 2270 2280 X
AATAAATCTTTTGTTACTCAA
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|ATAAATCTTTTGTTACTC
2210 2220

TOIG of: aaa16637 check: US-09-944-929-82 (1-2284)
AAA16637.SEQ Human secreted protein clone cf85_1 nucleotide 8840 from:

AAA16637 standard; cDNA; 2015

ВP

(first entry)

Human secreted protein clone cf85_1 nucleotide sequence SEQ ID NO:39

Human; secreted protein; immunestimulant; immunesuppressant; virucide; antibacterial; antifungal; cytostatic; antiinflammatory; dermatological; antidiabetic; antiasthmatic; antiarthritic; antirheumatic; protozoacide; antithyroid; immune deficiency; severe combined immunedeficiency; SCID; infection; HIV; hepatitis; malaria; autoimmune disorder; systemic lupus; connective tissue disease; multiple sclerosis; erythematosis; rheumatoid arthritis; autoimmune pulmonary inflammation; asthma; Guillain-Barre syndrome; autoimmune thyroiditis; myasthenia gravis; insulin dependent diabetes mellitus; graft-versus-host-disease; autoimmune inflammatory eye disease; allergy; ss.

14-AUG-1998; 17-AUG-1998; 04-SEP-1998; 13-AUG-1999; WO200009552-A1. 98US-0096622P. 98US-0096815P. 98US-0099229P. 99WO-US018298

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Gaps
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Residue Identity
                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAA16637 Length: 2015 September 29, 2004 14:43 Type: N Check: 8840
                                                                                                        23-OCT-1998;
08-JAN-1999;
12-FEB-1999;
18-FEB-1999;
30-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    or to map gene positions. The proteins can be used in the treatment of immune deficiencies and disorders, such as severe combined immunedeficiency (SCID), as well as viral, bacterial, fungal and other infections. These infections include human immunodeficiency virus (HIV), hepatitis, herpesviruses, mycobacteria, Leismania spp., malaria and candidiasis. The proteins can be used to treat autoimmune disorders such as connective tissue disease, multiple sclerosis, systemic lupus erythematosis, rheumatoid arthritis, autoimmune pulmonary inflammation, Guillain-Barre syndrome, autoimmune thyroiditis, insulin dependent diabetes mellitus, myasthenia gravis, graft-versus-host-disease and autoimmune inflammatory eye disease. The proteins can also be used to treat allergic conditions, such asthma. AAA16698 to AAA16774 represent probes for the human secreted proteins from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAA16618 to AAA16697 encode the human secreted proteins given in AAY94898 to AAY94980, isolated from human adult brain, adult thyroid, adult retina, foetal kidney, adult placenta, adult testis, whole embryo, adult cartilage, kidney, foetal brain, adult thymus, foetal placenta, adult uterus, adult tumour, and adult bladder, cDNA libraries. The polynucleotides and proteins are predicted to have biological activities which would make them suitable for treating, preventing or ameliorating medical conditions in humans and enimals. The polynucleotides can be used as markers for tissues in which the protein is preferentially expressed, as molecular weight markers on southern gels, and as chromosome markers for tags to identify chromosomes
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Wong GG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Jacobs K,
Merberg D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New polynucleotides encoding secreted proteins, which may have e.g. nutritional, chemokine, immune stimulating or suppressing, hematopoiesis regulating, tissue growth, activin/inhibin antiinflammatory or tumor
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 2015 BP; 562 A; 498 C; 388 G; 567 T; 0 U; 0 Other;
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P-PSDB; AAY94917.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         inhibition activity.
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, Treacy M, Agostino MJ,
Clark HF, Fechtel K;
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99US-0115234P.
99US-0119931P.
99US-0120575P.
99US-0132020P.
99US-0148424P.
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99% Matches
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Steininger RJ,
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score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No. 2245.6 2245.6 1920 5 6 6 1 6 8 6 6 6 1 6 8 6 6 6 1 6 8 6 6 6 1 6 8 6 6 6 1 6 8 6 6 6 1 6 8 6 6 6 1 6 8 6 6 6 1 6 8 6 6 6 1 6 6 6 1 6 6 6 1 6 6 6 1 6 6 6 1 6 6 6 1 6 6 6 1 6 6 6 1 6 6 6 1 6 6 6 1 6 6 6 1 6 6 6 1 6 6 6 1 6 6 6 1 6 6 1 6 6 1 6 2245. Score .939 045 045 045 218. 100.0 Match 7 178976 7 140974 7 198838 7 150942 7 150942 7 237931 7 174559 7 175033 188344 522 522 522 1 201474 1 236589 3 250782 2 224870 2 224870 2 224870 2 224870 188344 144000 Length B AC131617 AC079210 BC039930 AX869834 BD147198 BD147198 BD059530 AX874802 AC1126692 AC1126692 AC128093 AC128093 AC128093 AC12867 BD071236 AC131617 BD071236 AC391617 BD029567 BD029567 BD029567 BD029567 AC0313729 AC02031372 AC0321344 AC015720 AC0217070 AC027193 AR252736 AR429104 AX403627 AK001160 BD227259 AB060888 AX883044 BD160088 AK023622 BC032998 AX876122 BD155963 BD140585 AY358563 ALIGNMENTS AX869834 Sequence BD149996 Primer fo AX867136 Sequence BD147198 Primer fo BD059530 Secreted AX874802 Sequence BD154864 Primer fo AC126692 Mus muscu AC118035 Mus muscu AC118035 Mus muscu AC128093 Rattus no BD071236 Secreted AC131617 Homo sapi G27546 human STS S AX894034 Sequence BC031372 Mus muscu AL391095 Homo sapi AC0128031 Homo sapi AC017070 Homo sapi AC017070 Homo sapi AC017298 Homo sapi AC0172098 Homo sapi AC0172098 Homo sapi AC017319 Homo sapi AC017310 Homo sapi AC017311 Human DNA AL391095 Homo sapi AC0173254 Homo sapi AC0173254 Homo sapi AC0173254 Homo sapi AC01731 Human DNA AX876122 Sequence BD155963 Primer fo AK001160 Homo sapi BD227259 Secreted AB060888 Macaca fa AC131617 Homo sapi AC007621 Homo sapi BC039930 Mus muscu AR252736 Sequence AR429104 Sequence Description AC114324 Homo sapi Sequence Primer fo Sequence Polypepti Homo sapi

JOURNAL		TITLE	AUTHORS	REFERENCE		ORGANISM	SOURCE	KEYWORDS	VERSION	ACCESSION	DEFINITION	rocus	AR252736	RESULT 1	
Patent: US 6478825-A 514 12-NOV-2002;	treatment of bone defects	Implant, method of making same and use of the implant for the	Winterbottom, J.M., Shimp, L., Boyce, T.M. and Kaes, D.	1 (bases 1 to 2284)	Unclassified.	Unknown.	Unknown.	•	AR252736.1 GI:27300644	AR252736	Sequence 514 from patent US 6478825.	NA linear			
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61 GGGCGCGACAGAGCTTCCTCGCACCTGGATGGCAGGGGCGCGGGGTCCTCTCGAC 120 61 GGGCGCGACAGAGCTTCCTCGCACCTGGATGGAGCAGGGGCGCGGGGTCCTCTCACC 120 61 GGGCGCGACAGAGCTGTCCTCGACCTGGATGGAGCAGAGGGAGCGAGC	ource 1.284 /organism="unknown" /mol_type="genomic DNA" /mol_type="genomic DNA" y Match Local Similarity 100.0%; Score 2284; DB 6; Length 2284; Local Similarity 100.0%; Pred. No. 0; hes 2284; Conservative 0; Mismatches 0; Indels 0; Gaps 0; hes 2284; Gonservative 0; Mismatches 0; Indels 0; Gaps 0; 1 GCGGAGCATCCGCTGCGGTCCTCGCCGAGACCCCCGCGGATTCGCCGGTCCTTCCCGC 60	AR429104 AR429104 AR429104 AR429104 . Unknown. Unknown. Unknown. Unknown. Unknown. Unknown. Chassif I (basss Filvaroff and Wood, Secreted Cartilage Patent: U	2041 AGCTCTATGTAAAGTAATAAAGTATAAATTGCCATATAAATTCAAATTCAACTGGCTTT 2100 2041 AGCTCTATGTAAAGTAAATTAAAGTATAAATTGCCATATAAATTCAACTGGCTTT 2100 2041 AGCTCTATGTAAAACTAGATATAAATTAAATTGCCATATAAATTCAACTGGCTTT 2100 2101 TATGCAAAGAAACAGGTTAGGACATCTAGGTTCCAATTCATTC
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Db 781 TTTAAGATGGATGAAGCAAGT	AVINORS ABUREHAZI,A.U., BAKET, N.F., BOCGEGEIN,U., DEBNOYGTB,L., EACON,U., FENTRATA,N., Gerber,H., Gerritsen,M., Goddard,A., Godowski,P., Grimaldi,C.J., Gurney,A.L., Kljavin,I., Napjer,M.A., Pan,J.,	}
Qy 781 TTTAAGATGGATGAAGCAAGTG	Cocception and an arrange of the control of the con	REFE
Db 721 ATCTCATGGAGAGACACACTTT	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia: Eutheria: Primatea: Catarrhini: Hominidae	ç
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Db 241 GAAGGGAGCTTGACTTACACTT	Db 1981 AGTGGGAACCAAATTTAGGTAATTTTGGGTAATCTGTCTCTAAAATATTAGCTAAAAACAA 2040	문
Qy 241 GAAGGGAGCTTGACTTT	QY 1981 AGTGGGAACCAAATTAGGTAATTTTGGGTAATCTGTCTCTAAAATATTAGCTAAAAACAA 2040	Ş
Db 181 GATTATCCTTGACCTTTGAAGA	Db 1921 GCATGAGCCACCACAGCTGGCCCCCTTCTGTTTTATGTTTTGAGAAGGAATGA 1980	문
Qy 181 GATTATCCTTGACCTTTGAAGA	QY 1921 GGCATGAGCCACCACAGCTGGCCCCCTTCTGTTTTATGTTTTGGTTTTTTGAGAAGGAATGA 1980	Ş
Db 121 GCCAGAGAAAATCTCATCATC	Db 1861 GTCTCAAACTCCTGACCTAGTGATCCACCCTCCCCCAAAGTGCTGGGATTACA 1920	망
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Paoni, N.F., Roy, M., Stew		

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PN JP 2002505850-A/68

PD 26-FEB-2002

PF 01-DEC-1998 JP 2000523338

PF 03-DEC-1997 US 60/067411.11-DEC-1997 US 61/067417.11-DEC-1997 US 61/069425.16-DEC-1997 US 61/069425.16-DEC-1997 US 61/069425.16-DEC-1997 US 61/069694.16-DEC-1997 US 61/069697.17-DEC-1997 US 61/069617.05-JAN-1998 US 61/068017.05-JAN-1998 US 61/068017.05-JAN-1998 US 61/074086.09-FEB-1998 US 61/074086
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Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; E
Mammalia; Butheria; Primates; Catarrhini; Hominidae;
1 (bases 1 to 2284)
Wood, W.I., Goddard, A., Gurney, A.L., Yuan, J., Baker, K.
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9 41	/ OD XYEI="G1:37182248" / translation="MRFGGGGSLTYTLVIICFLTLRLSASQNCLKKSLEDVVIDIQSS / translation="MRFGGGGSLTYTLVIICFLTLRLSASQNCLKKSLEDVVIDIQSS	
841 AGTTCACAATTTTCCTCTGATCAAGAAATAGCTCATCTGCCTGC	<pre>/product = "FFGG316" /protein_id="AAQ88926.1"</pre>	
Db 781 TTTAAGATGGATGAAGCAAGTGCCCAGCTCCTTGCTTATAAGGAAAAAGGCCATTCTCAG 840	/note="PRO361" /codon start=1	
QY 781 TTTAAGATGAAGCAAGTGCCCAGCTCCTTGCTTATAAGGAAAAAGGCCATTCTCAG 840	CDS 2261521 /locus tag="UNO316"	
Db 721 ATCTCATGGAGAGACACACTTTCTCAGAAGTTTTGGATCCTCAGATCACCTGGAGAAACTA 780	gene 1. 228e UNA45410"	
OY 721 ATCTCATGGAGAGACACACTTTCTCAGAAGTTTGGATCCTCAGATCACCTGGAGAAACTA 780	/db xre="mxvA-" /db xre="mxvA-100"	
Db 661 TTTCACAAGCAGTCACTCCCCTAGCCCATCACACAGATTATTCAAAGCCCACCGAT 720	SOUTCE 1284 /organism="Homo sapiens" /mol trons"	
QY 661 TTTTCACAAGCAGTCACTCCCCTAGCCCATCATCACAGATTATTCAAAGCCCACCGAT 720	FEATURES Location/Qualifiers	FEATU
Db 601 TIGACCAGAAATTTGCCAAGCCAAGAGTTACCCCAGGAAGATTCTCTCTTACATGGCCAA 660	nitted (01-AUG-2003) Department of	nor
QY 601 TTGACCAGAAATTTGCCAAGCCAAGAGTTACCCCAGGAAGATTCTCTCTTACATGGCCAA 660	Clark,	AUTI
Db 541 TGTCCATTGAAACCAGCAAAAGGACTTATGAGTTACAGGATAATTACAGATTTTCCATCT 600	12975309	PUI
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Db 481 ACTCGAAAAACAGCTAGCAACCCAACTGCTACCTATTTTTCTGTCCCAACGAGGAAGCC 540	TITLE The Secreted Proteins and Secreted and Transmembrane Proteins.	TIT
QY 481 ACTCGAAAAACAGCTAGACACCCAACTGCTACCTATTTTTCTGTCCCAACGAGGAAGCC 540	Xie,M.H., Yansura,D., Yi,S., Yu,G., Yuan,J., Zhang,M., Zhang,Z., Goddard A. Wood W T. and Godowski P	
Db 421 TCTTGCTGTTCAACAAAAAACATATCAGGGGACAAAGCATGTAACTTGATCTTCGAC 480	Schoenfeld, J., Beshagiri, S., Simmons, L., Singh, J., Smith, V., Schoenfeld, J., Sandlen & Watanaba C Wiesad D Woode K	
OY 421 TCTTGCTGTTCAACAAAAAACATATCAGGGGACAAAGCATGTAACTTGATGATGTTCGAC 480	Heldens, F., Eacon, A., Kim, H.S., Klimowski, L., Jin, Y., Johnson, S., Towis I Tion Mark M Bobbis B Grapher	
Db 361 TCTAAGGGAATCAGAGGCAATGAGCCCGTATATACTTCAACTCAAGAAGACTGCATTAAT 420	AUTHORS Clark, H.F., Gurney, A.L., Abaya, E., Baker, K., Baldwin, D., Brush, J., Chow, B., Chui, C., Crowley, C., Currell, B., Deuel, B.,	AUTI
QY 361 TCTAAGGGAATCAGAGGCAATGAGCCCGTATATACTTCAACTCAAGAAGACTGCATTAAT 420	Mammaria; Eutheria; Filmaces; Cacarrhini; Hominidae; Homo	REFERI
Db 301 AGTCAGAATTGCCTCAAAAAGAGTCTAGAAGATGTCATTGACATCCAGTCATCTCTT 360	ens , Metazoa; Chordata; Craniata; Vertebrata; I	ORG
QY 301 AGTCAGAATTGCCTCAAAAAGAGTCTAGAAGATGTTGTCATTGACATCCAGTCATCTCTT 360		SOURCE
Db 241 GAAGGGACTTGACTTTGGTAATAATTTGCTTCCTGACACTAAGGCTGTCTGCT 300	N AY358563 AY358563.1 GI:37182247	ACCESSI VERSION
QY 241 GAAGGGAGCTTGACTTACACTTTGGTAATAATTTGCTTCCTGACACTAAGGCTGTCTGCT 300	z	DEFINI
181 GATTATCCTTGAAGACCAAAACTAAACTGAAATTTAAAATGTTCTTCGGGGGA		RESULT 5 AY358563
181 GATTATCCTTGACCTTTGAAGACCAAAACTAAACTGAAATTTAAAATGTTCTTCGGGGGA	5	ţ
Oy 121 GCCAGAGAGAAATCTCATCTGTGCAGCCTTCTTAAAGCAAACTAAGACCAGAGGAAG 180 1 <td>2281 TCAA 2284 </td> <td>물 원</td>	2281 TCAA 2284 	물 원
61 GGGCGCGACAGAGCTGTCCTCGCACCTGGATGGCAGGGAGGG	TTAA	? B
61 GGGCGCGACAGAGCTGTCCTCGCACCTGGATGGCAGCAGGGGCGCCGGGGTCCTCTCGAC	TTAAAACTTATTCCAGATGTAGTTCCTTCCAATTAAATATTTGAATAATCTTTTGTTAC	\$ &
1 GCGGAGCATCCGCTGCCGTCCTCGCCGAGACCCCCGCGGGATTCGCCGGTCCTTCCCGC 60	2161 TAAAATCAACTGTTTATATCAATTTCTAATGGATTTTGCTTTTTTATATGGATTCCT 2220	ф
Qy 1 GCGGAGCATCCGCTGCGGTGCCTCGCCGAGACCCCCGCGCGGATTCGCCGGGGGGACCCTTCCCGG 60	2161 TAAAATCAACTGTTTATATATCAATTTCTAATGGATTTGCTTTTTTTATATGGATTCCT 2220	ঠ
Best Local Similarity 100.0%; Pred. No. 0; Matches 2284; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	2101 TATGCAAAGAAACAGGTTAGGACATCTAGGTTCCAATTCACATTCTTGGTTCCAGA 2160	망

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5	2040	1 AGTGGGAACCAAATTAGGTAATTTTGGGTAATCTGTCTCTAAAATATTAGCTAAAAACAA	198: 198:
P & 8	1980 1980	1 GGCATGAGCCACCACCAGCTGGCCCCCTTCTGTTTTATGTTTGGTTTTTGAGAAGGAATGA	192: 192:
,	1920 1920	1 GTCTCAAACTCCTGACCTAGTGATCCACCCTCCTCGGCCTCCCAAAGTGCTGGGATTACA	186: 186:
•	1860 1860	1 ACACCIGGGTGATTTTTGTATTTTAGTAGAGACGGGGTTTCACCAIGTTGGTCAGGCIG	180
0	1800	1 GTTCAAGCGATTCTCCTGCCTCAGCCTCCTAAGTATCTGGGATTACAGGCATGTGCCACC	174: 174:
	1740 1740	1 TTGCCCAGGCTGGAGTGCAGTAGCACGATCTCGGCTCTCACCGCAACCTCCGTCTCCTGG	168
	1680	1 AGACAGGAAAATGCCCCCTTCTGCTTTCCTTTTTTTTTT	162: 162:
	1620 1620	1 AAGCCCAAATGCAATGAGTTTCTGCTGACTTGCTAGTCTTAGCAGGAGGTTGTATTTTGA	156: 156:
PEAT	1560 1560	1 GGGATCTATGTGGACATCTAAGGATGGAACTCGGTGTCTCTTAATTCATTTAGTAACCAG	150: 150:
JOO	1500	11 AGAATCCTTTCGGAATCACTCCGCAGGAAACGTTACTCAAGACTGGATTATTTGATCAAT	144: 144:
RRFFR OR	1440 1440	1 CTTATCGGGTCCCTGCTCTTTGGTGTCCTGTTCCTGGTGATAGGCCTCGTCCTCCTGGGT	138: 138:
ACCE VERS KEYW	1380	1 AGTTCCTCCCAGGGCAGTGTTCCAGAAAATCAGTACGGCCTTCCATTTGAAAAATGGCTT	132: 132:
RESU LOCU	1320 1320	1 GTGGAGTCTTCCACTATGAATAAAACTGCTTCCTGGGAAGGTAGGGAGGCCAGTCCAGGC	126:
Db st	1260 1260	1 TCCAACTTAACTTTGAACACAGGGAATGTGTATAACCCTACTGCACTTTCTATGTCAAAT	120:
₹ B \$	1200	1 ACCTTTCAGGCACCTACGGACTCGAAAGGCAGCTTAGAAACCATACCGTTTACAGAAATC	114: 114:
δ <u>β</u> τ	1140 1140	1 GTTTTTACACGGGCTGCGGCTACACTCCAAGCAATGGCTACAACAGCAGTTCTGACTACC	108
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Research Association for Biotechnology (JP)
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Sequence 17949 from Patent EP1074617.
AX883044 GI:40037945
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
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GAAGGGAGCTTGACTTACACTTTGGTAATAATTTGCTTCCTGACACTAAGGCTGTCTGCT
                                                                                    GATTATCCTTGACCTTTGAAGACCAAAACTAAACTGAAATTTAAAATGTTCTTCGGGGGA
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/protein_id="CAE91819.1"
/protein_id="CAE91819.1"
/db_xref="GG1:40037946"
/db_xref="GG1:40037946"
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EBACFLKPAKGLMSYR1ITDFPSLTRNLPSQBLATKEKGHSQSAQFSSDQEIAHL
LPENVSALPATVLAVASBHTTSATPKPATLLFTNASVTPSGTSQOLATTAPPVTTVTS
QPPTTLISTRATLAMATTAVLTTFQAPTDSKGSLETIPFTEISNLTLINTGN
VYNPTALSMNTESSTMNKTASMEGREASPGSSSQGSVEENQYCLPFEKWLLIGSLLF
GVLFLVIGLVLLGRILSESLRRKRYSRLDYLINGIYVDI"
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/db_xref="taxon:9606"
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99.8%;
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RESULT 7 BD160088 BD160088 BD160088 BD160088 BD160088 ACCESSION BD160088 BD160088.1 GI:27865846 KEYWORDS SURCEE Homo sapiens (human) ORGANISM Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.	OW 1181 CTMPROGGATCCTGCTGTTTGGATATACGGGTTATACGGGTT 140 1111 CTMPROGGATCCTGCTGTTTGGATATACGGTTATACGGGTTATACGGGTT 147 OW 1111 AGAANTCTTTGGAATCACTCTGCTGGATAACGGTTCCTGATTATTGATTCATTACTACAT OW 1111 AGAANTCTTTGGAATCACTCTGGATAACGGTTCCTGATTACTCAATTTGATTACCAGT OW 1150 AGGATCTATGTGGACATCTAAGGATCGAAGACTGTCCTTAATTCACTTAATTCATTTAGTACCAGT OW 1151 AGGATCTATGTGGACATCTAAGGATCGAAGACTGCTGCTCTTAATTCATTACTATTAGTACCAGT OW 1152 AGGATCTAAGTGGACATCTAAGGATCGAAGATCTTCGCTGTTCCTTAATTCATTACTATTTGATACCAGT OW 1153 AGGATCTAAGTGGACATCTTAGGATCTTCGCTTTCCTTTTTTTT

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RS Ota, T., Isogai, T., Nishikawa, T., Hayashi, K., Saito, K., Yamamoto, J., Ishii, S., Sugiyama, T., Wakamatsu, A., Nagai, K. and Otsuki, T. Primer for synthesizing full-length cDNA and use thereof Patent: JP 2002191363-A 14931 09-JUL-2002;

HELIX RESEARCH INSTITUTE
OS HOMO sapiens (human)
PN JP 2002191363-A/14931
PN JP 2002191363-A/14931
PN JP 2002191363-A/14931
PD 09-JUL-2000 JP 2000280990
PF 28-JUL-2000 JP 2000280990
PF 105HIO CTA, TAKAO ISCGAI, TETSUO NISHIKAWA, KOJI HAYASHI, KAORU PI TOSHIO CTA, TAKAO ISCGAI, TETSUO NISHIKAWA, KOJI HAYASHI, KAORU PI SAITO,
PI JUNICHI YAMAMOTO, SHIZUKO ISHII, TOMOYASU SUGIYAMA, AI WAKAMATSU, PI KEIICHI NAGAI, TETSUJI OTSUKI
PC C12N15/09,C07K14/47,C07K16/18,C12N1/15,C12N1/19,C12N1/21,C12N5/ PC C12P21/02,C12Q1/68//C12P21/08,G06F17/30,C12N15/00,C12N5/00 CC Primer for synthesizing full-length cDNA and use thereof FH Key
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                                        TGTCCATTGAAACCAGCAAAAGGACTTATGAGTTACAGGATAATTACAGATTTTCCATCT
                                                                        TCTTGCTGTTCAACAAAAAACATATCAGGGGACAAAGCATGTAACTTGATGATCTTCGAC
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                          TGTCCATTGAAACCAGCAAAAGGACTTATGAGTTACAGGATAATTACAGATTTTCCATCT
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/db_xref="taxon:9606"
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lbases 1 to 2297) Isogai, T. and Otsuki, T. Direct Submission Submitted (23-AUG-2000) Takao Isogai, Helix Research Institute, Genomics Laboratory; 1532-3 Yana, Kisarazu, Chiba 292-0812, Japan (E-mailigenomics@hri.co.jp, Tel:81-438-52-3975, Fax:81-438-52-3986) NEDO human cDNA sequencing project supported by Ministry of International Trade and Industry of Japan, CDNA full insert sequencing: Research Association for Biotechnology; cDNA library construction, 5'- & 3'-end one pass sequencing and clone selection: Helix Research Institute (supported by Japan Key Technology Center etc.) and Department of Virology, Institute of Medical Science, University of Tokyo.	Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 180gai, T., Ota, T., Hayashi, K., Sugiyama, T., Otsuki, T., Suzuki, Y., Nishikawa, T., Nagai, K., Sugano, S., Shiratori, A., Sudo, H., Wagatsuma, M., Hosoiri, T., Kaku, Y., Kodaira, H., Kondo, H., Sugawara, M., Takahashi, M., Chiba, Y., Ishida, S., Murakawa, K., Ono, Y., Takiguchi, S., Watanabe, S., Kimura, K., Murakami, K., Ishii, S., Kawai, Y., Saito, K., Yamamoto, J., Watkamatsu, A., Nakamura, Y., Nagahari, K., Masuho, Y., Ninomiya, K. and Iwayanagi, T. NEDO human cDNA sequencing project Unpublished	AK023622 2297 bp mRNA linear PRI 01-AUG-2002 Homo sapiens cDNA FLJ13560 fis, clone PLACE1007877. AK023622 GI:10435603 oligo capping; fis (full insert sequence). Homo sapiens (human)	1134 TIATGCAAAGAACAAGGTTAGGACATCTAGGTTCCAATTCCATTCTACATTCTTGGTTCCAG 2193 2160 ATAAAATCAACTGTTTATATCAATTCTAATGGATTTGCTTTTTTATATATGGATTCC 2219 21191			1714 GTTGCCCAGGCTGGAGTAGCAGGATCTCCGGCTCTCACCGCAACCTCCGGTCTCCTG 1773 1740 GGTTCAAGCGATTCTCCTGCCTCAGCCTCCTAAGTATCTGGGATTACAGGCATGTGCCAC 1799 1
Qy 481 ACTCGAAAAACAGCTAGCAACCCAACTGCTACTATTTTCTGTCCCAACGAGGAAGCC 540	Qy 301 AGTCAGAATTGCCTCAAAAAGAGTCTAGAGAATTGTTCATTGACATCCAGTCATCCTT 360	Db 154 GCCAGAGAGAAATCTCATCTGTGCAGCCTTCTTAAAGCAAAATGTTCTCGGGGGA 210 Qy 181 GATTATCCTTGACCTTTGAAGACCAAAACTAAAATGTTCTTCGGGGGA 240	Qy 1 GCGGAGCATCCGCTGCGGTCCTCGGCCGAGACCCCCGGGGATTCGCCGGC 60	SEAC FLAFANCIMS XI ILLE FOLLERULE PROBLEMENT OF SQAFTE LIMITOR SEPTICISED FOR THE FACTOR FOR THE FOLLER	/clone="place1007877" //tissue_type="placenta" /clone lib="placenta" /clone protein protein: pME18SFL3" /clone protein product" /codon start=1 /protein id="hab14621.1" /db xref="gl:10435604" /translation="MFFGGEGSLTYTLVIICFLTLRLSASQNCYLKSLEDVVIDIQSSLEVYTSTOEDOLINSCCSTKNISGDKACNLMIFDTRKTARQPNCYLFFCPN EER/NEYETTENEDUNSCCSTKNISGDKACNLMIFDTRKTARQPNCYLFFCPN EER/NEYETTENEDUNSCCSTKNISGDTTRKTARQPNCYLFFCPN EER/NEYETTENEDUNSCCSTKNISGDTTRUSCCSTKNISGDTTRKTARQPNCYLFFCPN EER/NEYETTENEDUNSCCSTKNISGDTTRUSCTTRUSCTTRUSCTTRUSCTTRUSCTTRUSCTTRUSCTTRUSCTTRUSCTTRUSCTTRUSCTTRUSCTTRUSCTTRUSCTTRUSCTTRUSCTTRUS	FEATURES Location/Qualifiers 1.2297 source /organism="Homo sapiens" /mol_type="mRNA" /db xref="taxon:9606"

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195	954 AGGCATGAGCCACCAGCTGGCCCCTTCTGTTTTATGTTTTGGTTTTTGAGAAGGAATG 2013
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21	194 ATAAAATCAACTGTTTATATCAATTTCTAATGGATTTGCTTTTCTTTTTATATGGATTCC 2253
22	220 TTTAAAACTTATTCCAGATGTAGTTCCTTCCAATTAAATATTTG 2263
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	bp mRNA linear PRI
~	Homo saplens hypothetical protein FLJ10298, mkNA (CDNA Cione MGC:26021 IMAGB:4824116), complete cds.
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	Klausner,R.D., Collins,F.S., Wagner,L., Shenmen,C.M., Schuler,G.D., Altschul,S.F., Zeeberg,B., Buetow,K.H., Schaefer,C.F., Bhat,N.K.,
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	Scheetz.T.E. Brownstein M.T. Usdin T.B. Toshivuki.S.
	Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,
	McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richarde, S.,
	Worley,K.C., Hale,S., Garcia,A.M., Gay,L.J., Hulyk,S.W., Villalon,D.K., Muzny,D.M., Sodergren,E.J., Lu,X., Gibbs,R.A.,
	<pre>Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S., Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,</pre>
	Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D.,

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2 (bases 1 to 2333) Strausberg,R.

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Generation and initial analysis of more than 15,000 full-length
human and mouse cDNA sequences
Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
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				/ Match 97.1%; Local Similarity 99.5%; nes 2258; Conservative	QPPTTLIS VYNPTALS GVLFLVIG	LSKGIRGN EEACPLKP SKPTDISW	/protein /db_xref /db_xref /db_xref	/db_xref="Locu /db_xref="Locu 2761571 /codon_start=1 /nroduct="hymo-	/lab_host="DH1" /note="Vector: 12333 /gene="RI.T1029	/db_refe /clone=" /tissue /clone]		the land	Anup Madan, Jessica Fahey, Erin Madan, Stephanie Rodrigues, Amy	CDNA Library Arrayed by: The DNA Sequencing by: Institute http://www.systemsbiology.org	Email: cgapbs-remail.nih.gov Tissue Procurement: Miklos Pa CDNA Library Preparation: Mi Toshivuki and Piero Carninci	USA NIH-MGC Project URL: h On Aug 25, 2003 this s Contact: MGC help desk	ubmitted (21-JUN ene Collection (nstitute, 31 Cen
GATTATCCTTGACCTTTGAAGACCAAAACTAAACTGAAATTTAAAATGTTCTTCGGGGGA 	GCCAGAGAGAAATCTCATCATCTGTGCAGCCTTCTTAAAGCAAACTAAGACCAGAGGGAG 	GGGCGCGACAGAGCTGTCCTCGCACCTGGATGGCAGCAGGGGGCGCCGGGGTCCTCTCGAC	GCGGAGCATCCGCTGCGGTCCTCGCCGAGACCCCCGCGCGGATTCGCCGGTCCTTCCCGCGGAGCATTCGCCGGTTCCTTCC	1%; Score 2218.8; 5%; Pred. No. 0; 0; Mismatches	QPPTTLISTYPTRAATICAMATTA LITTEGA POOKSESTETIPTEISULTIATIO VYNPTALSMSNVBSSTMNKTASWEGREASPGSSSQGSVPENQYGLPFEKWILLIGSILF GVLFLVIGLVLGRILSESLRKKRYSRLDYLINGIYVDI"	LSKGTIRGNED TYTSTOGLEINGCESTKAI SGDKAKKILMI DTIRKTARGDEN TID TEXT LSKGTIRGNED TYTSTOGLEINGCESTKAI SGDKAKKILMI IDTIRKTARGPROYL PECOL EEACPLIKPAKGLINSYRII ITDFPSLTRNLPSQBLPQEDSLLHGPSQAVTPLAHHHTDY SKPTOI SWROTILSQKFGSSDHLEKLPKUDEASAQLIAY YEEKGHSQSSQFSSDQEI AHL SKPTOI SWROTILSQKFGSSDHLEKLPKUDEASAQLIAY YEEKGHSQSSQFSSDQEI AHL	/protein id="AAH32998.1" /protein id="AAH32998.1" /db_xref="GI:21542503" /db_xref="LocusID:54682" /translation="MPRGGEGEIT"	BID:5468:	host="DH10B" - - "Vector: pBluescript" 3333	"MATATA" (db xref="Haxon:9606" (clone="MGC:26021 IMAGE:4824116" (rissue type="Testis" (clone %ib=NNTH MGC 97"	Location/Qualifiers 12333 /organism="Homo sapiens"	the I.M.A.G.B. COMPORTIUM/LINE at: http://image.ll IRAK Plate: 33 Row: h Column: 14 one was selected for full length sequencing because the following selection criteria: matched mRNA gi:	ca Fahey, Erin Helton, Ma. Rodrigues, Amy Sanchez and	CDNA Library Arrayed by: The I.M.A. DNA Sequencing by: Institute for S: http://www.systemsbiology.org	Email: cgapbs remail.nih.gov Tissue Procurement: Miklos Palkovits, CDNA Library Preparation: Michael J. Toshivuki and Piero Carninci (RIERN)	RL: http://mgc.no his sequence veri desk	Submitted (21-UN-2002) Mational Institutes of Health, Mammal. Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda; MD 20892-25:
nactgaaatttaaaat hactgaaatttaaaat	ITCTTAAAGCAAACTA ITCTTAAAGCAAACTA	3GCAGCAGGGGCGCCG 3GCAGCAGGGGCGCCG	CCCGCGCGGATTCGC	3; DB 9; Length ; es 7; Indels	YSRLDYLINGIYVDI"	STRNI SGDKACNLMIF TRNLPSQELPQEDSLL LFKMDEASAQLLAYKE		rotoin FI.Tinoopa	Çt ≡	1824116"		ma eq	lton, Mar nchez and	I.M.A.G.E. Consortium for Systems Biology	its, M.D., Ph.D. J. Brownstein (NHGRI)	http://mgc.nci.nih.gov sequence version replaced gi:21542502 k	Institutes of He omics Office, Na llA03, Bethesda;
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Ota,T., Isogai,T., Nishikawa,T., Hayashi,K., Saito,K., Yamamoto, Ishii,S., Sugiyama,T., Wakamatsu,A., Nagai,K. and Otsuki,T. Primers for synthesising full-length cDNA and their use Patent: EP 1074617-A 11027 07-PEB-2001; Research Association for Biotechnology (JP)
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1621 AGACAGAAANGCCCCCTTCTGCTTTCC-TTTTTTTTTTTTGGAGACAGAGTCTTGCTCT 1679	561 AAGCCCAAATGCAATGAGTTTCTGCTGACTTGCTAGTCTTAGCAGGAGGTTGTATTTTGA	1501 GGGATCTATGTGGACATCTAAGGATGGAACTCGGTGTCTCTTAATTCATTTAGTAACCAG 1560 	1441 AGÁATCCTTTCGGAATCACTCCGCAGGAAACGTTACTCAAGACTGGATTATTTGATCAAT 1500 	1381 CTTATCGGGTCCCTGCTCTTTGGTGTCCTGTTCCTGGTGATAGGCCTCGTCCTCCTGGGT 1440	1321 AGTTCCTCCCAGGGCAGTGTTCCAGAAAATCAGTACGGCCTTCCATTTGAAAAATGGCTT 1380	1261 GTGGAGTCTTCCACTATGAATAAAACTGCTTCCTGGGAAGGTAGGGAGGCCAGTCCAGGC 1320	1201 TCCAACTTAACTTGAACACAGGGAATGTGTATAACCCTACTGCACTTCTATGTCAAAT 1260 	ACCTTTCAGGCACCTACGGACTCGAAAGGCAGCTTAGAAACCATACCGTTTACAGAAATC	1081 GTTTTTACACGGGCTGCGGCTACACTCCAAGCAATGGCTACAACAGCAGTTCTGACTACC 1140 	1021 ACCACAGCTCCACCTGTAACCACTGTCACCTCTCAGCCTCCCACGACCCTCATTTCTACA 1080	961 ACCCTTCTACCCACCAATGCTTCAGTGACACCTTCTGGGACTTCCCAGCCACAGCTGGCC 1020	901 CTCCCAGCTACGGTGGCAGTTGCTTCTCCACATACCACCTCGGCTACTCCAAAGCCCGCC 960 	841 AGTICACAATTITCCTCTGATCAAGAAATAGCTCATCTGCTGCTGAAAATGTGAGTGCG 900 	781 TTTAAGATGAAGCAAGTGCCCAGCTCCTTGCTTATAAGGAAAAAGGCCATTCTCAG 840	721 ATCTCATGGAGAGACACACTTTCTCAGAAGTTTGGATCCTCAGATCACCTGGAGAAACTA 780	661 TTTTCACAAGCAGTCACTCCCCTAGCCCATCATCACACAGATTATTCÂAAGCCCACCGAT 720	
																	
			AUTHORS	~ <u>%</u>	ACCESSION VERSION KEYWORDS SOURCE		Db 2219	Db . 2159 Qy 2280	Db 2099	Db 2039		Db 1919					ـــ ـــ
GEIICHI 5/09,C07 312P21/0	8-JUL- OSHIO, AITO,	HELIX RESEARCH INSTITUTE OS Homo sapiens (human) PN JP 2002191363-A/10806 PD 09-JUL-2002	sogai, Sugiy	TE ME	1 GI:27861721 11 GI:47861721 13.363-A/10806.	BD155963 2221 bp DNA linear PAT 17-JAN-2003	19 CTC 2221		ATAMAN CARC USI I SA AI USA II	I IA IS CHANGANCASSI INCONCERCIA CON INCONCERC	THE NUMBER OF A DATA ASSOCIATION OF A STORY		ANGEGRAGE ANGER ANALYSIS AND ANGER ANGER ANALYSIS AND ANGER ANGER ANALYSIS AND ANGER AND ANGER ANGER AND ANGER ANGER AND ANGER AND ANGER AND ANGER AND ANGER AND ANGER AND ANGER ANGER AND ANGER ANGER AND ANGER AND ANGER ANGER AND ANGER ANGER AND ANGER ANGER ANGER ANGER AND ANGER ANG	GGTCTCAAACTCCTGACCTAGTGATCCACCTTCCTCGGCCTCCCAAAGTGCTGGGATTAC GGTCTCAAACTCCTGACCTAGTGATCCACCTTCCTCGGCCTCCCAAAGTGCTGGGATTAC		GATICAMACGRITUTECTOCCTICAGCCTCCTAAGTATCTGGGATTACAGGCATGTGCCAC	619 GTTGCCCAGGCTGGAGTGCAGTAGCACGATCTCGGCTCTCACCGCAACCTCCCGTCTCCTG 1678

721 ATCTCATGAGAGAGACACTTTCTCAGAAGTTTGGATCCCCAGATCACCTGGAGAACTA	Oy 601 TTGACCAGAAATTTGCCAAGCCAAGAGTTACCCCAGGAAGATTCTCTCTTACATGGCCAA 660	Oy 481 ACTCGAAAAACAGCTAGACAACCCAACTGCTATTTTTCTGTCCCAACGAGGAAGCC 540	304GGGAATCAGAGGCAATGAGCCCGTATATACTTCAACTCAAGAAGACTGCATTAAT 421 TCTTGCTGTTCAACAAAAAACATATCAGGGGACAAAGCATGTAACTTGATGATGATCTTCGAC	301 AGTCAGAATTGCCTCAAAAAGAGTCTAGAAGATGTTGTCATTGACATCCAGTCATCTCTT 304304304304305305305305305305	Oy 181 GATTATCCTTGACCTTTGAAGACCAAAACTAAACTGAAATTTAAAATGTTCTTCGGGGA 240	OD 101 GGCGCGACAGAGCTGTCCTCGCACCTGGATGACAGCAGGGGCGCCGGGGTCCTCCGAC 160 OY 121 GCCAGAGAGAAATCTCATCATCTGTGCAGCCTTCTTAAAGCAAACTAAGACCAGAGGGAG 180	41 GCGGAGCATCCGCTGCGGTCCTCGCCGAGACCCCGGGGCGGATTCGCCGGTCCTTCCCGC 61 GGGCGCGACAGAGCTGTCCTCGCACCTGGATGGCAGGAGGGGGCGGGGGTCCTCTCGAC	y Match Local S hes 2173	FEATURES Location/Qualifiers source l2221 /organism="Homo Bapiens" /mol_type="genomic DNA" /db_xref="taxon:9606"	FT CDS (266). (1456).
Qy 1800 CACACCTGGGTGATTTTTGTATTTTAGTAGAGACGGGTTTCACCATGTTGGTCAGGCT	QY 180 GTTGCCCAGGTTGAGTGCAGTAGTAGTAGTAGTAGTAGTAGTAGTAGTAGTAGTAGTA	1499 1621 1559	Db 1379 AGAATCCTCTCGGAATCACTCCGCAGGAAACGTTACTCAAGACTGGATTATTTGATCAAT OY 1501 GGGATCTATGTGGACATCTAAGGATGGAACTCGGTGTCTCTTAATTCATTTAGTAACCAG	Qy 1381 CTTATCGGGTCCTCTTTGGTGTTCCTCTTGGTGATAGGCCTCGTCGTGGGT		1201 1139	1141	Qy 1021 ACCACAGCTCCACCTGTAACCACTGTCACCTCCCACGACCACCACCTCATTCTACA		Qy 901 CTCCCARGCTACCGGCGAGTTGCTTCTCCACATACCACCTCGGCTACTCCAAAGCCCGGC 960

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/mol_type="mRNA" /mol_type="mRNA" /db_xrefe="taxon:9606" /clone="NT2RM1001115" /cell_line="NYT2" /cell_type="teratocarcinoma" /clone_lib="NYT2RM100115" /clone_lib="NYT2RM1001000" /note="Cloning vector: pUC19FL3~mRNA from uninduced NT2 /neuronal precursor cells." 266: .1459 /note="unnamed protein product" /codon_start=1	Helix Research institute (supported by dapan key rechnology center etc.) and Department of Virology, Institute of Medical Science, University of Tokyo. FEATURES Location/Qualifiers Bource 1. 2221		Nakamura, Y., Nagahari, K., Masuho, Y., Ninomiya, K. and Iwayanagi, T. TITLE NEDO human cDNA sequencing project JOURNAL Unpublished REFERENCE 2 (bases 1 to 2221) AUTHORS Isogai, T. and Otsuki, T. TITLE Direct Submission	Hayashi,K., Sugiyama,T., Otsuki,T., K., Sugano,S., Shiratori,A., Sudcri,T., Kaku,Y., Kodaira,H., Kondo,shi,M., Chiba,Y., Ishida,S., Murakan, Watanabe,S., Kimura,K., Murakan, Saito,K., Yamamoto,J., Wakamatsu,Saito,K.,	to ENDOCHTINASE 2 PRECURSOR (EC 3.2.1.14). AK001160 AK001160.1 GI:7022238 oligo capping; fis (full insert sequence). Homo sapiens (human) Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutelec Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutelec	RESULT 12 AKOO1160 AKOO1160	Qy 2280 CTC 2282 Db 2219 CTC 2221	2220 TTT	2160 ATAAAATCAACTGTTTATATCAATTTCTAATGGATTTGCTTTTCTTTTTATATGGATTCC	Qy 2100 TTATGCAAAGAAACAGGTTAGGACATCTAGGTTCCAATTCATCACATTCTTGGTTCCAG 2159	Qy 2040 AAGCTCTATGTAAAGTAATAAAGTATAAATTGCCATATAAATTTCAAÅTTCAACTGGCTT 2099	Db 1919 AAGTGGGAACCAAATTAGGTAATTTTGGGTAATCTGTCTCTAAAATATTAGCTAAAAACA 1978
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/protein id="baa91526.1" /db xref="GI:702239" /translation="Mrfggegstyttlgirgnepvytstqedcinsccstknisgdka /translation="Mrfggegstyttlgirgnepvytstqedcinsccstknisgdka /translation="Mrfggegstyttlgirgnepvytstyrittoppestrenlesgelpe Qebstlhggesqavtplahhhttdysketdismrdtlsgkegssphieklfkakada Qebstlhggesqavtplahhhttdysketdismrdtlsgkeftsphieklfundasad Llayketkghegsgogelahhhttdysketdistvetraaatlqamattavlttteqab svtpsgtsqpdlattappvttvtsqppttlistvetraaatlqamattavltttteqab tdskcsletipftetssklingtsfalsmvesstmaktasmegresss commission for the first politic first perfections.	BEVYTSTOEDCINSCCSTKNISG RAKGLMSYRIITDEPSLTRNIESO RAKGLMSYRIITDEPSLTRNIESO RADTLSOKORGSSDHLEKLEKNDEA PATVAVASENTTSATTEAUTLE YTVFTRAAATLOAMATTAVLTTTE MSNVESSTMNKTASWEGREASPG	ELP SAQ YNA YNA SSS
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241 GAAGGGAGCTTGACTTACACTTTGGTAATAATTTGCTTCCTGACACTAAGGCTGTCTGCT	ACACTAAGGCTGTCTGCT 3	100
301 AGTCAGAATTGCCTCAAAAAGAGTCTAGAAGATGTTGTCATTV	GACATCCAGTCATCTCTT 3	160
361 TCTAAGGGAATCAGAGGCAATGAGCCCGTATATACTTCAACTCAAGAAGACTGCATTAAT	CAAGAAGACTGCATTAAT 4	120
421 TCTTGCTGTTCAACAAAAACATATCAGGGGACAAAGCATGTAACTTGATGATCTTCGAC	4 4	180
481 ACTCGAAAAACAGCTAGACAACCCAACTGCTACCTATTTTTCTGTCCC.	AACGAGGAAGCC 5 AACGAGGAAGCC 4	540 178
541 TGTCCATTGAAACCAGCAAAAGGACTTATGAGTTACAGGATAATTACAGATTTTC	CATCT 6	500
601 TTGACCAGAAATTTGCCAAGCCAAGAGTTACCC	CCAGGAAGATTCTCTCTTACATGGCCAA 6	98 0
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721 ATCTCATGGAGAGACACACTTTCTCAGAAGTTTGGATCCTCAGATCACCTGGAGAAACTA 	J J	780 718
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Custom primer used for sequencing
(5' end primer [CTTCTGCTCTAAAAGCTGCG];
3' end primer [CGACCTGCAGCTCGAGCACA]).
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Lab host:
Vector:
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Isolation of full-length cDNA clones from macaque brain cDNA
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oligo capping; fis (full insert sequence).
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SKPTDISWRETLPQKFGSSDHLEKLFNMDKASAQLLVYKEKGHSQSSQISSDQEIAHL
LPENVSVFPATVAVASPHTTSATPKPAIRLFTNASVTFSGTSQPQLATTSEPVTTVTS
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VYNPTALSMSNVKSSATNKTASWEGREASFGRSSGCNVPENQYGLÞFEKWLLIGSLLF
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255. .1550
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2133 CCAATTCACTTCACATTCTTGGTTCCAGATAAAATCAACTGTTTATATCAATTTCTAATGG 2192	2073 ATATAAATTCAAAATTCAACTGGCTTTTATGCAAAGAAACAGGTTAGGACATCTAGGTT 2132	2013 CTGTCTCAAAAAATATTAGCTAAAAACAAAGCTCTATGTAAAGTAATAAAGTATAATTGCC 2072	1954 TTATGTTTTGAGAAGGAATGAAGTGGGAACCAAATTAGGTAATTT-TGGGTAAT 2012 	1894 TCGGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACCACGAGCTGGCCCCCTTCTGTT 1953	1834 CGGGGTTTCACCATGTTGGTCAGGCTGGTCTCAAACTCCTGACCTAGTGATCCACCCTCC 1893	1774 TATCTGGGATTACAGGCATGTGCCACCACACCTGGGTGATTTTTGTATTTTTAGTAGAGA 1833	1714 GCTCTCACCGCAACCTCCGTCTCCTGGGTTCAAGCGATTCTCCTGCCTCAGCCTCCTAAG 1773	1654 TITTTTTGGAGACAGAGTCTTGCTCTGTTGCCCAGGCTGGAGTGCAGTAGCACGATCTCG 1713	1621 AGACAGGAAAATGCCCCCTTCTGCTTTCC	1561 AAGCCCAAATGCAATGAGTTTCTGCTGACTTGCTAGTCTTAGCAGGAGGTTGTATTTTGA 1620 	1501 GGGATCTATGTGGACATCTAAGGATGGAACTCGGTGTCTCTTAATTCATTTAGTAACCAG 1560 	1441 AGAATCCTTTCGGAATCACTCCGCAGGAAACGTTACTCAAGACTGGATTATTTGATCAAT 1500 	1381 CITATCGGGTCCCTGCTCTTTGGTGTCCTGTTCCTGGTGATAGGCCTCGTCCTCCTGGGT 1440	1321 AGTTCCTCCCAGGGCAGTGTTCCAGAAAATCAGTACGGCCTTCCATTTGAAAAATGGCTT 1380 	1261 GTGGAGTCTTCCACTATGAATAAAACTGCTTCCTGGGAAGGTAGGGAGGCCAGTCCAGGC 1320 	1201 TCËAACTTAACTTTGAACACAGGGAATGTGTATAACCCTACTGCACTTTCTATGTCAAAT 1260 	1141 ACCTTTCAGGCACCTACGGACTCGAAAGGCAGCTTAGAAACCATACCGTTTACAGAAATC 1200 	
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REFERENCE	TITLE JOURNAL REFERENCE AUTHORS TITLE JOURNAL		RESULT 15 ACC131617/c LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM REFERENCE AUTHORS	D OY D OY D
TX 77030, USA	Li,J., Li,Z., Lichtarge,O., Lieu,C., Liu,W., Loulseged,H., Lozado,R.J., Lu,X., Lucier,A., Lucier,R., Luna,R., Ma,J., Maheshwari,M., Mapua,P., Martin,R., Martindale,A., Martinez,E., Massey,E., Mawhiney,E., McLeod,M.P., Meador,M., Mei,G., Metzker,M., Miner,G., Miner,Z., Mitchell,T., Mohabbat,K., Morgan,M., Morris,S., Moser,M., Neal,D., Newtson,J., Newtson,N., Nguyen,A., Nguyen,N., Nguyen,N., Nickerson,E., Nwokenkwo,S., Oguh,M., Okwuonu,G., Oragunye,N., Oviedo,R., Pace,A., Payton,B., Peery,J., Perez,L., Peters,L., Pickens,R., Primus,E., Pu,L.L., Quiles,M., Ren,Y., Rives,M., Rojas,A., Rojubokan,I., Rolfe,M., Ruiz,S., Savery,G., Scherer,S., Scott,G., Shen,H., Shooshtari,N., Sisson,I., Sodergren,E., Sonaike,T., Sparke,A., Stanley,H., Stone,H., Sutton,A., Svatek,A., Tabor,P., Tamerisa,A., Tamerisa,K., Tang,H., Tansey,J., Taylor,C., Taylor,T., Telfrod,B., Thomas,M., Thomas,S., Usmani,K., Vasquez,L., Vera,V., Villalon,D., Vinson,R., Wang,O., Wang,S., Ward-Moore,S., Warren,R., Washington,C., Watlington,S., Williams,G., Williamson,A., Wleczyk,R., Wooden,S., Worley,K., Weinstock,G. and Gibbs,R. Direct Submission Submission Submisted (25-AUG-2002) Human Genome Sequencing Center, Department of Molecular and Human Genome Sequencing Center, Department of Molecular and Human Genome Sequencing Center, Department apylor Plaza, Houston, TX 77030, USA	Alsbrooks, S.L., Amaratunge, H.C., Are, J.R., Ayele, M., Banks, T., Barbaria, J., Benton, J., B., Blankenburg, K., Bonnin, D., Bouck, J., Bowe, S., Brieva, M., Brown, E., Brown, M., Bryant, N.P., Buhay, C., Burch, P., Burkett, C., Burrell, K.L., Byrd, N.C., Carron, T.F., Carter, M., Cavazos, S.R., Chacko, J., Chavez, D., Chen, G., Chen, R., Chen, Z., Chowdhry, I., Christopoulos, C., Cleveland, C.D., Cox, C., Coyle, M.D., Dathorne, S.R., David, R., Davila, M.L., Davis, C., Davy-Carroll, L., Dederich, D.A., Delaney, K.R., Delgado, O., Denn, A.L., Ding, Y., Dinh, H.H., Douthwaite, K.J., Draper, H., Dugan-Rocha, S., Durbin, K.J., Earnhart, C., Edgar, D., Edwards, C.C., Elhad, C., Escotto, M., Earnhart, T., Ferraguto, D., Plagg, M., Ford, J., Foster, P., Frantz, P., Falls, T., Ferraguto, D., Plagg, M., Ford, J., Foster, P., Frantz, P., Gabisi, A., Gao, J., Garcia, A., Garner, T., Garza, N., Gill, R., Gorrell, J. H., Guevara, W., Gunaratne, P., Hale, S., Hamilton, K., Gorrell, J., Ghevara, W., Gunaratne, P., Hale, S., Hamilton, K., Homesi, F., Howard, S., Huber, J., Hall, S., Hube, J., Jackson, L. B., Jackson, B., Jiá, Y., Johnson, R., Jolivet, S., Joudah, S., Jackson, E., Jiá, Y., Johnson, R., Jolivet, S., Joudah, S., Karlsson, E., Kelly, S., Khan, U., King, L., Korvah, J., Kovar, C., Karlsson, E., Kelly, S., Khan, U., King, L., Korvah, J., Kovar, C., Land, A., Karlsson, E., Kelly, S., Khan, U., King, L., Korvah, J., Kovar, C., Karlsson, E., Kelly, S., Khan, U., King, L., Korvah, J., Kovar, C., Land, C., Land, C., Land, J., Kovar, C., Land, J., Kalland, J., Kalland, J., Kovar, C., Land, J., Kovar, C., Land, J., Kalland, J., Kalland, J., Kalland, J., Kovar, C., Land, J., Kalland, J., Ka	AC131617 AC131617 Homo sapiens clone RP11-613M22, *** SEQUENCING IN PROGRESS unordered pieces. AC131617 AC131617 AC131617 AC131617 AC131617 AC131619 ACTIVEFIN. HOMO sapiens (human) Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutele Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 18344) Muzny, D. M., Adams, C., Adio-Oduola, B., Ali-osman, F.R., Alle	2156 CCAATTAATTCACATTCTTGGTTCCAGATAAAATCAACTGTTTATATCAATTCTAATGG 2215 2193 ATTTGCTTTTCTTTTATATGGATTCCTTTAAAACTTATTCCAGATGTAGTTCCTTCC

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TITLE
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Best Local Similarity
Matches 1706; Conserv
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Center code: BCM
Web site: http://www.hgsc.bcm.tmc.edu/
Draffing Center Code: BCM
Contact: hgsc-help@bcm.tmc.edu
Center project Information
Center project name: HEMO
Center clone name: RP11-613M22
Center clone name: RP11-613M22

Sequencing vector: Plasmid;
Chemistry: Dye-terminator Big Dye: 100% of reads
Assembly program: Phrap; version 0.99039
Consensus quality: 18374 bases at least Q40
Consensus quality: 183789 bases at least Q20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NOTE: Estimated insert size may differ from sequence length

(see http://www.hgsc.bcm.tmc.edu/docs/Genbank_draft_data.html).

NOTE: This is a 'working draft' sequence. It currently consists of 7 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
GAGTTACCCCAGGAAGATTCTCTCTTACATGGCCAATTTTCACAAGCAGTCACTCCCCTA
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1. .188344
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/mol_type="genomic DNA"
/db_xref="taxon:9606"
/clone="RP11-613M22"
                                                                                                                                                                                                                                                                                                                                                                                                                                                       6318: contig of 6318 bp in length
6418: gap of unknown length
13860: contig of 7442 bp in length
13960: gap of unknown length
23960: gap of unknown length
20118: contig of 6158 bp in length
20218: gap of unknown length
20218: gap of unknown length
35907: contig of 15689 bp in length
36007: gap of unknown length
58079: contig of 2072 bp in length
58079: contig of 2072 bp in length
58079: contig of 404041 bp in length
102220: contig of 404041 bp in length
102320: gap of unknown length
102320: gap of unknown length
102320: gap of unknown length
103344: contig of 86024 bp in length
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Search completed: September 25, 2004, 12:45:11 Job time: 9027 secs

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Post-processing: Minimum Match 0%
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1: sp_archea:*
2: sp_bacteria:*
3: sp_fungi:*
4: sp_human:*
5: sp_invertebrate
6: sp_mammal:*
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8: sp_organelle:*
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11: sp_votent:*
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Gapop 10.0 , Gapext 0.5
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2211
1 MFFGGEGSLTYTLVIICFLT.....LRRKRYSRLDYLINGIYVDI 431
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sp_plant:*
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sp_vertebrate:*
sp_unclassified:*
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sp_bacteriap:*
sp_archeap:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

16	15	14	13	12	11	10	9	8	7	o	ъ	4.	u	2		Result No.
156.5	157.5	160.5	168	180.5	188	196.5	197	197.5	503	1164.5	1179.5	2022	2039	2210	2211	Score
7.1	7.1	7.3	7.6	8.2	8.5	8.9	8.9	8.9	22.7	52.7	53.3	91.5	92.2	100.0	100.0	Query Match I
328	2448	477	519	1349	449	392	449	392	194	414	414	397	431	431	431	Length DB
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homo	Q8wwq5 homo sapien	Q14887 homo sapien	Q7ytr7 caenorhabdi	Q8wwq4 homo sapien	Q96f05 homo sapien	Q9d8nl mus musculu	Q9h2k4 homo sapien	Q8vcp2 mus musculu	Q8k0i0 mus musculu	Q9cr33 mus musculu	Q80v71 mus musculu	Q9nw60 homo sapien	Q95kg7 macaca fasc	Q8nec1 homo sapien	Q9h8j5 homo sapien	Description

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6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5		6. 5	6.5	6.5	6.5	6.6	6.6	6.6	6.6	6.6	6.7	6.7	6.8	6.9	7.0	7.0	7.0
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Q9czb2 mus musculu	Q8v016 equine herp	Q7zw07 brachydanio	Q9w468 drosophila		Q8sy55 drosophila	Q.	039782 equine herp	039781 equine herp	Q8v015 equine herp	mus mus	Q80z22 mus musculu	Q8wxi7 homo sapien	Q9vey6 drosophila	Q8mrh5 drosophila	Q14395 homo sapien	Q8tax7 homo sapien		Q9nye4 homo sapien	Q24017 drosophila	Q86akl dictyosteli	₩.	Q95qf5 caenorhabdi			Q8tfg9 schizosacch	094317 schizosacch	Q20908 caenorhabdi	Q17921 caenorhabdi

ALIGNMENTS

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61 EDCINSCCSTKNISGDKACNLMIFDTRKTARQPNCYLFFCPNEBACPLKPAKGLMSYRII 120 	1 MFFGGEGSLTYTLVIICFLTLRLSASQNCLKKSLEDVVIDIQSSLSKGIRGNEPVYTSTQ 60 	Query Match 100.0%; Score 2211; DB 4; Length 431; Best Local Similarity 100.0%; Pred. No. 8.2e-159; Matches 431; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	Hypothetical protein. SEQUENCE 431 AA; 46810 MW; 189136416F0F89AE CRC64;	4621.1;			S., Kimura K., Murakami K., Ishii S., Kawai Y.,	M., Chiba Y., Ishida S., Murakawa K., Ono Y., Takiguchi	M., Hosoiri T., Kaku Y.,	lsogal T., Ota T., Hayashi K., Sugiyama T., Otsuki T., Suzuki I., Nishikawa T., Naqai K., Suqano S., Shiratori A., Sudo H.,	centa;	SEQUENCE FROM N.A.			Primates; Catarrhini; Hominidae;	Rukarvota: Metazoa: Chordata: Craniata: Vertebrata: Euteleostomi:		(TrEMBLrel. 22, Last		01-MAR-2001 (TrEMBLrel. 16, Created)		Q9H8J5 PRELIMINARY; PRT; 431 AA.	35	

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Submitted (JUN-2002) to the EMBL/GenBank/DDBJ EMBL; BC032998; AAH32998.1; -.
Hypothetical protein.
SEQUENCE 431 AA; 46824 MW; 1BCEEBD168AC839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-OCT-2002 (TrEMBLrel. 22, Created)
01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
01-MR-2003 (TrEMBLrel. 23, Last annotation update)
Hypothetical protein FLJ10298.
Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Best Local S
Matches 398
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TISSUB-Temporal cortex;
TISSUB-Temporal cortex;
Osada N., Hida M., Kusuda J., Tanuma R., Iseki K., Hirai Suzuki Y., Sugano S., Hashimoto K.;
"Isolation of full-length cDNA clones from macaque brain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q95KG7; PRELIMINARY; PRT; 431 AA.
Q95KG7;
01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
11-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Hypothetical protein.
Macaca fascicularis (Crab eating macaque) (Cynomolgus monkey).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Cercopithecinae; Macaca.
                                                                                                                                                                                                                                                                                                                                                                                               libraries.";
Submitted (APR-2001) to the EMBL/GenBank/DDBJ EMBL; AB060888; BAB46892.1; -.
Hypothetical protein.
SEQUENCE 431 AA; 47104 MW; BF10996E87F76C6
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Pred. No. 8.1e-146;
9; Mismatches 24;
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Best Local
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Q80V71 PRELIMINARY;
Q80V71;
Q1-JUN-2003 (TrEMBLrel. 2:
Q1-JUN-2003 (TrEMBLrel. 2:
Q1-JUN-2003 (TrEMBLrel. 2:
Q130403P13Rik protein.
Mus musculus (Mouse).
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Q9NW60;
01-OCT-2000
01-OCT-2000
01-OCT-2002
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Isogai T., Ota T., Hayashi K., Sugiyama T., Otsuki T., Suzuki Y., Nishikawa T., Nagai K., Sugano S., Shiratori A., Sudo H., Sugawara Wagatsuma M., Hosoiri T., Kaku Y., Kodaira H., Kondo H., Sugawara Takahashi M., Chiba Y., Ishida S., Murakawa K., Ono Y., Takiguchi Watanabe S., Kimura K., Murakami K., Ishii S., Kawai Y., Saito K., Yamamoto J., Wakamatsu A., Nakamura Y., Nagahari K., Masuho Y., Ninomiya K., Iwayanagi T.;
"NEDO human cDNA sequencing project.";
Submitted (FEB-2000) to the EMBL/GenBank/DDBJ databases.
EMBL; AK001160; BAA91526.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hypothetical protein FLJ10298.
Homo sapiens (Human).
Eukaryota, Metazoa; Chordata, Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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397 AA; 4
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(TrEMBLrel. 15, Last sequence up)
(TrEMBLrel. 22, Last annotation
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Pred. No. 1.4e-144;
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   RESULT
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RA Allausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altechul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Altechul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Schapleton M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Robards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
A Whiting M., Madan A., Young A.C., Shevchenko Y., Bouferd G.G.,
A Whiting M., Touchman J.W., Green E.D., Dickeon M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
A Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
A Tones S. Marra M.A.
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Best Local
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submitted (NOV-2002) to the EMBL/GenBank/DDBJ databases
EMBL; BC039930; AAH39930.1; -.
SEQUENCE 414 AA; 44531 MW; 84AFB759D1B22755 CRC64;
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Mammalia; Eutheria;
NCBI_TaxID=10090;
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"Generation and initial analysis of more than 15,000 and mouse cDNA sequences.";
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
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VB/N; TISSUE=Breast
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                                                                                                        RVSVGSASLNKGPKSQHGLSFEKWLLIGTLLCGVLFLVIGLVLLGRMLVEALRRKRYSRL
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A Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
A Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
A Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
A Kadota K., Matsuda H.A., Ashburner M., Battalov S., Casavant T.,
A Kedota K., Matsuda H.A., Ashburner M., Battalov S., Casavant T.,
A Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
A Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
A Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
A Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
A Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
A Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
A Schriml L.M., Stoubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
A Sakai K., Okido T., Frunno M., Aono H., Baldarelli R., Barsh G.,
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A Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
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A Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
A Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
A Sasaki H., Toyo-oka K., Wang K.H., Weltz C., Whittaker C., Wilming L.,
B Hayashim-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
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"Analysis of the mouse transcriptome bas
60,770 full-length cDNAs.";
Nature 420:563-573(2002).
EMBL; AK018636; BAB31329.1; --
EMBL; AK018635; BAB31319.1; --
EMBL; AK018635; BAB31319.1; --
EMBL; AK033526; BAB231319.1; --
EMBL; AK033527; BAG28341.1; --
EMBL; AK033527; BAG28357.1; --
EMBL; AK033527; BAG28892.1; --
EMBL; AK046837; BAG28892.1; --
EMBL; AK046837; BAG28892.1; --
EMBL; AK046837; BAG28892.1; --
EMBL; AK046837; BAG2892.1; --
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Q9CR33;
Q9CR33;
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01-JUN-2001
01-MAR-2003
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01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
9130403P13RIK protein (Weakly similar to NT2RM1001115
9130403P13RIK.
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Mammalia; Eutheria;
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Hayashizaki Y.;
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HLRKHIKADETSMQL--PEEKSHSQSLQLPSELKMAHLLPKTVPTPPTTVAVAPLRNVSA
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                                                                                                                                                                                            Q8VCP2;
01-MAR-2002
01-MAR-2002
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01-OCT-2002
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01-OCT-2002 (TrEMBLrel.
RIKEN cDNA 1810055G02 gc
1810055G02RIK.
                               Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                              Mus musculus (Mouse)
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Mammalia; Eutheria;
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                               Chordata;
Rodentia;
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Rodentia;
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Pred. No. 3.1e-30;
                               Craniata; Ver
Sciurognathi;
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                               Vertebrata; Euteleostomi;
chi; Muridae; Murinae; Mus
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Q9H2K4;
01-MAR-2001
01-MAR-2001
                                                                                                                                                                                                       InterPro; PROSITE; F
                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.

MEDLINE=21295044; PubMed=11401438;

Twells R.C.J., Metzker M.L., Brown S.D., Cox R., Garey C., Ham

Hey P.J., Levy E., Nakagawa Y., Philips M.S., Todd J.A., Hess

"The Sequence and Gene Characterization of a 400-kb Candidate

for IDDM4 on Chromosome 11q13.";
                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (Human).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Strausberg R.;
Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; BC019471; AAH19471.1; -.
MGD; MGI:1919306; 1810055G02Rik.
                                                                                                                                                                                                                                        Genomics 72:231-242(2001).
EMBL; AF264781; AAG36936.1; -.
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PS00063; ALDOKETO_REDUCTASE_3; 1.
449 AA; 46100 MW; 11C8B0FCC3BBF921 CRC64;
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                                                                     LVIICFLTLRLSASQNCLKKSLEDVVIDIQSSLSKGIRGNEPVYTSTQEDCINSCCSTKN
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ISGDKACNLMIFDTRKTARQPNCYLFFCPNEEACPLKPAKGLMSYRIITDFPSLTRNLPS
                                  LVLIWIFSLSLSESHAASNDPRNFVPNKMWKGLVKRNASVETVDNKTSEDVTMAAAS----
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                                                                                                                              8.9%;
22.2%;
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26.5%; Pred. No. 9.3
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16,
25,
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                                                                                                              49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Created)
                                                                                                          Score 197; DB 4;
Pred. No. 1.2e-06;
9; Mismatches 166
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7; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                               Craniata; Vertebrata; E Catarrhini; Hominidae;
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                                                                                                            166;
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                                                                                                                                             Length 449;
                                                                                                          Indels 196;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
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ID QDDBN
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AC QDDBN
DT 01-JU
DT 01-JU
DT 01-JU
DT 01-JU
DT 01-GC
GN 18100
GN 18100
GN 18100
GN HS MWS m
OCC Eukkar
OC Mammas
RN [1]
RP SEQUE
RP SEQUE
RA KAWAii
RA AIZAM
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RA SAILO
RA KAWAii
RA AIZAM
RA GENTI
RA SAILO
RA GABAK
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                               Nature 409:685-690(2001).
EMBL; AK007868; BAB25319.1; -.
MGD; MGI:1919306; 1810055G02Rik.
               SEQUENCE
                                                                                                        Hayashizaki Y
                                                                                     "Functional annotation of a
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RA Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,
RA Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
RA Alzawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Alzawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Kadota K., Matsuda H.A., Ashburner M., Battalov S., Casavant T.,
RA Kuchl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Kuchl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Kuchl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Schriml L.M., Staubli F., Suzuki R., Toylita M., Gariboldi M.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Blake J., Boffelli D., Hofmann M., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
RA Mordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Sasaki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
Wanshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q9D8N1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
NCBI_TaxID=10090;
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01-OCT-2002 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN=C57BL/6J; TISSUE=Pancreas; MEDLINE=21085660; PubMed=11217851;
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41095 ₹ ;

6BBA958C73489874 CRC64;

full-length

mouse

cDNA collection.";

Query Match Best Local

Similarity

Length

392;

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Q96F02
ID Q96F0
AC Q96F0
DT 01-DE
DT 01-DC
DT Chrom
OS Homo
OC Eukax
OC Mamma
OX NCBL
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                                                                                                                                                                                                                                                                                                                                            Query Match 8.5%; Score 188; DB 4; Best Local Similarity 22.0%; Pred. No. 5.8e-06; Matches 116; Conservative 49; Mismatches 167
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Q96F05;
01-DEC-2001
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01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-DEC-2003 (TrEMBLrel. 25, Last annotation update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Chromosome 11 open reading frame 24.
Homo sapiens (Human).
Eukaryota, Metazoa; Chordara; Craniata; Vertebrata;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae
                                                                                                                                                                                                                                                                                                                                                                                                                 Submitted (JUL-2001) to the EMBL/GenBank/DDBJ database EMBL, BC011765, AAH11765.1; -. Genew, HGNC:1174; -. IFR001395; Aldo/ket_red. IRR001395; Aldo/ket_red. PROSITE; PS00063; ALDOKETO_REDUCTASE_3; 1. SEQUENCE 449 AA; 46142 MW; BF984ĀA360F6C415 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Strausberg R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE=Skin;
                                       113
                                                                                                                                                   133 QELPQEDSLLHGQFSQAVTPLAHHHTDYSKFTDISWRDTLSQKFGSSDHLEKLFKMDEAS
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                                                                          193 AQLLAYKEKGHSQSSQFSSDQEIAHLLPENVSALPATVAVASPHT-----TSATPKPATL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                156 HHTDYSKPTDISWRDTLSQKFGSSDHLEKLFKMDEASAQLLAYKEKGHSQSSQFSSDQEI
                                                                                                                    77
                                                                                                                                                                                                                              73 ISGDKACNIMIFDTRKTARQPNCYLFFCPNEEACPLKPAKGIMSYRIITDFPSLTRNLPS
                                                                                                                                                                                                                                                                                                         13 LVIICFLTLRLSASQNCLKKSLEDVVIDIQSSLSKGIRGNEPVYTSTQEDCINSCCSTKN 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               88 HGTNTSTPT-----TREGTTDRV-----TSRTLAVPTSSGPSSAEQTRPTTI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KTASWEGREASPGSSSQGSV-----PENQYGLPFE----KWLLIGSLLFG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TVPARATSLSPDVDVISPTTQPS--PTLP-----TQGTGG--PGTLLTTEQVGTKTTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TLQAMATTAVLTTTFQAPTDSKGSLETIPFTEISNLTLNTGNVYNPTALSMSNVESSTMN
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   ---LPTNASV--TPS--GTSQPQLATTAPPVTTVTSQPPTTLISTVFTRAAATLQAMATT
                                                                                                                                                                                                                                                                    LVLIWIFSLSLSESHAASNDPRNFVPNKMWKGLVKRNASVETVDNKTSEDVTMAAAS----
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                                       -SITTAASSMTVASSAP-TTAASSTTVASIAPTTAASSMTAASSTPMTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8.9%; Score 196.5; DB 11;
26.1%; Pred. No. 1.1e-06;
                                                                                                                  -----SRTDVSEP-----ATSGVAADGVTSIAPTAVAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        42; Mismatches
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                                                                                                                                                                                           -----TSAAHLNS
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Q8WWQ
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01-MAR-2002 (TrEMBLrel.
01-MAR-2002 (TrEMBLrel.
01-QCT-2003 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (Human).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Human mucin gene MUCSAC: organization repetitive region.";
Biochem. J. 358.763-772(2001).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     316 SLETIPFTEISNLTLNTGNVYNPTAL------SMS-NVESSTMNKTASWEG-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      165 ALPAPTSTSTGRTPSTTATGHPSLSTALAQVPKSSALPRTATLATLATRA----QTVATT
                                                                                                                                                                                                                                                                                                54 PVYTSTQEDCINSCCSTKNISGD-KACNLMIFDTRKTARQPNCYLFFCPNEEACPLKPAK 112
                                                                                                                                                                                                                                                                                                                                                                                                   88;
                                                                                                                                                                                                                                                                                                                                                                4 GGEGSLTYTLVI-----ICFLTLRLSASQNCLKKSLEDVVID-----IQSSLSKGIRGNE
                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                 STISA-PTTSTISAPTTSTTSAPTASTTSAPTSTSSAPTTNTTSAPTTSTTSAPITSTIS
                                                                                                                                                                                                                                GLMSYRIITDFPSLTRNLPSQELPQEDSLLHGQFSQ-----AVTPLAHHHTDY 160
                                                                                                                                                                                                                                                                                                                                   GGDKE-TYNNIIRSGEKICRRPQEITRLQ-CRAKSHPEVSIEHLGQVVQCSREEGL----
APTTSTTSTPQTSTISSPTTSTTPTPQTSTTSSPTTSTTSAPTTSTTSAPTTSTTSTPQT
                             PPVTTVTSQPPTTLISTVFTRAAATLQAMATTAVLTTTFQAPTDSKGSLETIPFTEISNL
                                                                                               ENVSALPATVAVASP--HTTSATPKPATLLPTNASVTP-----SGTSQPQLATTA
                                                                                                                               APTTSTTSAPTTS------TTSAPTTSTTSTPQTTTSSAPTSSTTSAPTT
                                                                                                                                                              SKPTDISWRDTLSQKFGSSDHLEKLFKMDEASAQLLAYKEKGHSQSSQFSSDQEIAHLLP
                                                                                                                                                                                                   VTAPSPLVGEPPAQTQSTSSWQKSRTTTLVTSSITSTTQTSTTSAPTTSTTPASIPSTTS
                                                                                                                                                                                                                                                               ------VLCCETPKGCPVTSTS
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                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1349
                                                                                                                                                                                                                                                                                                                                                                                                 8.2%; Score 180.5; DB 4; Length 1349;
21.6%; Pred. No. 9.2e-05;
7ative 62; Mismatches 174; Indels 83;
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Last annotation update)
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TLNTGNVYNPT-ALSMSNVESSTMNKTASWEGREASPGSSSQGSVPE

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Q1488
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AC Q1488
AC Q1488
AC Q1488
DT Q1-NC
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DT Q1-JU
DE Mucir
GN MUCSP
OS Homo
OC Eukar
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Best Local
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014887; O1-NOV-1996 (TrEMBLrel. 0
01-NOV-1996 (TrEMBLrel. 0
01-JUN-2003 (TrEMBLrel. 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q7YTR7
Q7YTR7;
01-OCT-2003
SEQUENCE FROM N.A.
TISSUE=Tracheobronchial mucosa;
Guyonnet-Duperat V., Audie J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mortimore B.J.;
Submitted (OCT-1996) to the EMBL/GenBank/DDBJ databases
EMBL; Z81044; CAE17706.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A. STRAIN=Bristol N2; MEDLINE=99069613;
                                                                                          NCBI_TaxID=9606;
                                                                                                                        Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN-Bristol N2;
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Eukaryota; Metazoa; Nematoda; Chromadorea;
Rhabditidae; Peloderinae; Caenorhabditis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hypothetical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              investigating biology.";
Science 282:2012-2018(1998).
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                                                                                                                                                                       sapiens (Human)
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                                                                                                                                                                                                                     (Fragment)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      --LFGVLFLVIGLVLLGRILSESLRRKRYSRLDY
                                                                                                                                                                                                                                                                                                                                                                                                                                                          YDLTSILFNALGTVTL-----LMRKIFCNIQY 350
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519 AA; 5
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                                                                                                                 Chordata;
Primates;
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27.1%;
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25, Last sequence up
25, Last annotation
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Last sequence update)
Last annotation updat
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Pred. No. 0.000
22; Mismatches
                                                                                                                     Craniata; Vo
Catarrhini;
                                                                                                                                                                                                                                                                                                                                         PRT;
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    Debailleul V.,
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                                                                                                                                            Vertebrata;
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                                                                                                                     Hominidae;
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       Laine
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    Α.,
                                                                                                                                                Euteleostomi;
                                                                                                                        Homo
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    Buisine
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Q8WWQ5
ID Q8WWQ
    SOUTH DESCRIPTION OF THE PROPERTY OF THE PROPE
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Best Local S
Matches 66
    NON TER
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Q8WWQ5
Q8WWQ5;
Q1-MAR-2002 (TrEMBLrel. 2
Q1-MAR-2002 (TrEMBLrel. 2
Q1-OCT-2003 (TrEMBLrel. 2
                                                                                               GO; GO:0006412; P:protein biosynthesis; InterPro; IPR001209; Ribosomal S14. InterPro; IPR0021919; TIL Cysrich. InterPro; IPR001007; VWF_C. InterPro; IPR001007; VWF_D. Pfam; PF001826; TIL; 2. Pfam; PF00094; vwd; 3.
                                                                                                                                                                                                                                         repetitive region.",
Biochem. J. 358:63-772(2001).
EMBL; AJ298317; CACR3874.1; -.
Genew; HGNC:7515; MUCSAC.
GO; GO:0005622; C:intracellular; IEA.
GO; GO:0005840; C:ribosome; IEA.
GO; GO:0003735; F:structural constituent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Zouitina-Galiegue S., Pigny P., Aubert J., Porchet N "Characterization of the human mucin gene MUCSAC: a cysteine-rich domain for 11p15 mucin genes."; Biochem. J. 0:0-0 (1994).
EMBL; Z34277; CAA84031.1; -.
PIR; S53362; S53362.
                PROSITE; PS00527; RIBOSOMAL_S14;
NON_TER 2448 2448
                                                           SMART; SM00214; VWC;
SMART; SM00216; VWD;
                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE=21426417; PubMed=11535137; Escande F., Aubert J.P., Porchet N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                       "Human mucin gene MUC5AC: organization
                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE=Trachea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mucin 5 (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
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1 Similarity 24.4%;
66; Conservative 4
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477 AA;
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50666 MW;
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Primates;
260970 MW;
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25,
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Last annotation updat
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Pred. No. 0.00075;
2; Mismatches 114;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Craniata; Vertebrata; I Catarrhini; Hominidae;
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A5C1BD627844D952 CRC64;
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on of its 5
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Search (Job time	4g 49	B 8	g 8	B 8	8 8	B 8	B 8	Query M Best Lo Matches
Search completed: September 24, 2004, 14:16:34 Job time : 128 secs	352 NKTASWEGREASPGSS 367 	292 ATLQAMATTAVLTTTFQAPTDSKGSLETIPFTEISNLTLNIGNVYNPTALSMSNVESSTM 351	254VTPSGTSQPQLATTAPPVTTVTSQPPTTLISTVFTRAA 291	2142IAHLLPENVSALPATVAVASPHTTSATPKPATLLPTNAS 253	169RDTLSQKFGSSDHLEKLFKMDEASAQLLAYKEKGHSQSSQFSSDQ 213 :	118 RIITDFESLTRNLPSQELPQEDSLLHGQPSQAVTPLAHHHTDYSKPTDISW 168	63 CINSCCSTKNISGDKACNIMIFDTRKTARQPNCYLFFCPNEEACPLKPAKGIMSY 117	Query Match 7.1%; Score 157.5; DB 4; Length 2448; Best Local Similarity 23.1%; Pred. No. 0.011; Matches 87; Conservative 38; Mismatches 142; Indels 109; Gaps 16;

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Title:
Perfect score:
                                                                                                                                                                                                   Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1500
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Maximum DB seq length: 2000000000
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                                                                                                                                                                                                                                                                                                                                                                                             Searched:
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A_Geneseq_29Jan04:*
1: geneseqp1980s:*
2: geneseqp1990s:*
3: geneseqp2000s:*
4: geneseqp2001s:*
5: geneseqp2003s:*
6: geneseqp2003s:*
7: geneseqp2003bs:*
8: geneseqp2004s:*
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Gapop 10.0 , Gapext 0.5
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2211
1 MFFGGEGSLTYTLVIICFLT.....LRRKRYSRLDYLINGIYVDI 431
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Copyright (c) 1993 - 2004 Compugen Ltd.
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	80	7	ი	₅	4	ω	N	1	No.	Result
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Abu92254 Novel hum	Abu59488 Novel hum		Abu59045 Human sec	Abu60355 Novel hum	Abu56315 Human sec	Abo26036 Human PRO	Abu59339 Human sec	Abu57250 Human PRO	Abu58364 Novel hum	Abu64930 Human sec	Abu72590 Novel hum	Abu60244 Human PRO	Human	Abu60623 Human sec	Human	Abu59192 Novel hum	Abu58114 Human PRO	Abu55934 Human sec	Aab65299 Human PRO	Aab95464 Human pro	Aab34739 Human sec	Aab01325 Human PRO	Aab33428 Human PRO	Aay17834 Human PRO	Description	

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	Human	Human	Human	Novel	Novel	Human	Human	Human	Human	Human	Novel	Novel	Human	Novel	Human	Novel	Novel	Human	Human	Human	Human	Human	Human	Human	Human	Human	Human	Human	Human	Human	Human	Human	Human	Human	Human	Human	Human	Human	Human	Human	Human	Nove1	Human	Human	Human
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ALIGNMENTS

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AAY17834 standard; protein; 431 AA.

XX
AC AAY17834;

XX
12-AUG-1999 (first entry)

XX
DT 12-AUG-1999 (first entry)

XX
Human PRO361 protein sequence.

XX
Human; PRO protein; tumour necrosis factor family; TNF; cytokine;

XX
Human; PRO protein; transmembrane protein; inflammation disorder.

XX
OS Homo sapiens.

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PN
W09928462-A2.

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PD 10-JUN-1999.

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01-DEC-1998; 98WO-US025108.

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                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention describes nucleic acids encoding PRO secreted and transmembrane proteins used therapeutically. The PRO proteins have cytostatic, anti-inflammatory, anti-proliferative and immunosuppressive activity. The proteins and polynucleotides can be used in therapy, identification of homologues, raising antibodies and design of probes and primers. They can be used in a range of diseases related to proteins that they have homology with, e.g. a PRO protein having homology to complement proteins may be used in inflammatory responses
                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
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            DYLINGIYVDI
                                                       EASPGSSSQGSVPENQYGLPFEKWLLIGSLLFGVLFLVIGLVLLGRILSESLRRKRYSRL
                                                                                                 AVLTTTFQAPTDSKGSLETIPFTEISNLTLNTGNVYNPTALSMSNVESSTMNKTASWEGR
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                                          EASPGSSSQGSVPENQYGLPFEKWLLIGSLLFGVLFLVIGLVLLGRILSESLRRKRYSRL
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Pred. No. 3.6e-173;
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10-DEC-1999
11-FEB-2000
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99WO-US005028
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99US-01312371P
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The present invention describes sixty four human PRO proteins which can CC be used in the treatment of immune related diseases. The human PRO proteins, anti-PRO antibodies, agonists and antagonists are useful for CC proteins, and diagnosing immune related disorders. The disorders are CC selected from systemic lupus erythematosus, rheumatoid arthritis, costeoarthritis, juvenile chronic arthritis, spondyloarthropathies, CC systemic selectosis, idiopathic inflammatory myopathies, Sjogren's CC syndrome, systemic vasculitis, sarcoidosis, autoimmune haemolytic consenia, autoimmune thrombocytopaenia, thyroiditis, diabetes mellitus, CC anaemia, autoimmune thrombocytopaenia, thyroiditis, diabetes mellitus, CC immune-mediated renal diseases, demyelinating diseases of the central and CC peripheral nervous systems, hepatobiliary diseases, inflammatory bowel CC disease, gluten-sensitive enteropathy and Whipple's disease, autoimmune CC disease, gluten-sensitive enteropathy and Whipple's disease, autoimmune CC diseases of the lung, and transplantation associated diseases including CC represent PCR primers and hybridisation probes used in the isolation of thuman PRO sequences. AAC58679 to AAC58642 and AAB33471 to AAB33477 CC represent human PRO polynucleotide and protein sequences given in the CC exemplification of the present invention
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Kabakoff RC,
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Lu Y, Pan
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J, Pennica
tanabe CK,
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Pred. No. 3.6e-173;
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16-DEC-1998;
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Gerritsen I
Hillan KJ,
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N-PSDB; AAA49567.
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                                                                                                                                   New human nucleic acids encoding secreted and transmembrane polypeptides, designated as PRO polypeptides, useful as pharmaceutical and diagnostic
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                                                                                                                                                                Secreted protein; human; autoimmune disorder; multiple sclerosis; ulcer, systemic lupus erythematosus; rheumatoid arthritis; anaemia; stroke; haematopoiesis regulation; tissue regrowth; wound healing; haemophilia; hlzheimer's disease; Parkinson's disease; Shy-drager syndrome; cancer; contraceptive; infection; growth inhibition; hyperproliferative disordes
 17-MAR-1999;
17-MAR-1999;
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01-OCT-1999;
29-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel proteins and polypeptides useful for the treatment of e.g multiple sclerosis, systemic lupus erythmatosus, rheumatoid arthritis, cancer, Alzheimer's disease, Parkinson's disease, stroke, anemia and ulcers.
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                                          TDFPSLTRNLPSQELPQEDSLLHGQFSQAVTPLAHHHTDYSKPTDISWRDTLSQKFGSSD
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99US-0157247P.
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No. 3.6e-173;
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The present invention describes primer sets for synthesising 5602 full-
length cDNAs defined in the specification. Where a primer set comprises:

(a) an oligo-dT primer and an oligonucleotide complementary to the
complementary strand of a polynucleotide which comprises one of the 5602
nucleotide sequences defined in the specification, where the
coligonucleotide comprises at least 15 nucleotides; or (b) a combination
of an oligonucleotide comprising a sequence complementary to the
complementary strand of a polynucleotide which comprises a 5'-end
sequence and an oligonucleotide comprising a sequence complementary to a
complementary strand of a polynucleotide which comprises a 5'-end
sequence and an oligonucleotide comprises a 3'-end sequence complementary to a
coligonucleotide which comprises a 3'-end sequence, where the
coligonucleotide comprises at least 15 nucleotides and the combination of
the 5'-end sequence's'-end sequence is selected from those defined in the
specification. The primer sets can be used in antisense therapy and in
gene therapy. The primers are useful for synthesising polynucleotides,
particularly full-length cDNAs. The primers are also useful for the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27-AUG-1999;
11-JAN-2000;
02-MAY-2000;
09-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Primer sets for synthesizing polynucleotides, particularly the 5602 length cDNAs defined in the specification, and for the detection and diagnosis of the abnormality of the proteins encoded by the full-ler
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ota T,
Ishii
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; primër;
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, Sugiyama
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; 2000JP-00118776.
; 2000JP-00183767.
; 2000JP-00241899.
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                                                                                                                                                                                                                                                                                                                                                                                                                                    NO 17950;
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T, Wakamatsu A,
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A, Nagai K,
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Otsuki
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   detection and/or diagnosis of the abnormality of the proteins encoded by the full-length cDNAs. The primers allow obtaining of the full-length cDNAs easily without any specialised methods. AAH03166 to AAH13628 and AAH13639 to AAH18742 represent human cDNA sequences; AAB92446 to AAB95893 represent human amino acid sequences; and AAH13629 to AAH13632 represent coligonucleotides, all of which are used in the exemplification of the
 AAB65299
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                                                                      DYLINGIYVDI
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 standard;
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                                                                                                                                EASPGSSSQGSVPENQYGLPFEKWLLIGSLLFGVLFLVIGLVLLGRILSESLRRKRYSRL
                                                                                                                                                                                           AVLTTTFQAPTDSKGSLETIPFTEISNLTLNTGNVYNPTALSMSNVESSTMNKTASWEGR
                                                                                                                                                                                                           AVLTTTFQAPTDSKGSLETI PFTEISNITLNTGNVYNPTALSMSNVESSTMNKTASWEGR
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protein;
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                                                                                                                                                                                                                                                                                                                                07-DEC-2000
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    99WO-US012252.
99US-0141037P.
99US-0143048P.
99US-0144758P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  protein; PRO; cytostatic; cell death;
mapping; tissue typing;
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20-FEB-2000;
11-FEB-2000;
21-FEB-2000;
22-FEB-2000;
24-FEB-2000;
24-FEB-2000;
24-FEB-2000;
25-MAR-2000;
15-MAR-2000;
15-MAR-2000;
                                                                                                                                                                                                                                                                              The present invention describes human secreted and transmembrane PRO proteins. The PRO proteins have cytostratic activity. The PRO proteins can be used for targeted delivery of bioactive molecules, such as toxins, radiolabels or antibodies, that cause cell death. PRO nucleotide sequences, and their fragments, can be used as hybridisation probes, in chromosomal and gene mapping, and in the generation of anti-sense RNA and NA. They may also be used to produce transgenic animals which are used to develop and screen therapeutically useful resgents. The PRO nucleotide and protein sequence can be used for tissue typing and in treating cancer. Anti-PRO antibodies can be used in diagnostic assays. AAF44270 to AAF44470 represent PCR primers and hybridisation probes used in the isolation of human PRO sequences. AAF44087 to AAF63300 represent human PRO polynucleotide and protein sequences given in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Grimaldi
Roy MA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRO polynucleotides used to produce polypeptides used to target bioactive molecules such as toxins, radiolabels or antibodies, to specific cells, to cause targeted cell death.
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                                                                                                                                                 HLEKLFKMDEASAQLLAYKEKGHSQSSQFSSDQEIAHLLPENVSALPATVAVASPHTTSA
                                                                                              EDCINSCCSTKNISGDKACNLMIFDTRKTARQPNCYLFFCPNEEACFLKPAKGLMSYRII
                                                                                                            EDCINSCCSTKNISGDKACNLMIFDTRKTARQPNCYLFFCPNEEACPLKPAKGLMSYRII
                                                        TDFPSLTRNLPSQELPQEDSLLHGQFSQAVTPLAHHHTDYSKPTDISWRDTLSQKFGSSD
                                         TDFPSLTRNLPSQELPQEDSLLHGQFSQAVTPLAHHHTDYSKFTDISWRDTLSQKFGSSD
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99US-0146322P.
99US-0149396P.
99WG-US021547.
99WG-US021547.
99WG-US028313.
99WG-US03095.
12000WG-US03095.
12000WG-US00376.
12000WG-US00376.
12000WG-US00376.
12000WG-US004914.
12000WG-US004914.
12000WG-US005841.
12000WG-US005841.
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12000WG-US00684.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KP, Botstein D, Desnoyers L, Gerber H, Geritsen ME, Godd AL, Kljavin IJ, Napier MA, Tumas D, Watanabe CK, Willi
                                                                                                                                                                                                      0
                                                                                                                                                                                                                  Score 2211;
Pred. No. 3
                                                                                                                                                                                                       Mismatches
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3.6e-173;
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r MA, Pan J,
Williams PM,
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Godowski Pu;
Paoni NF;
Wood WI;
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RESULT 7
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Gerritsen MF
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22-UNU-1999;

15-SEP-1999;

30-NOV-1999;

30-NOV-1999;

30-DEC-1999;

11-DEC-1999;

11-DEC-1999;

11-DEC-1999;

11-DEC-1999;

11-DEC-1999;

11-DEC-1999;

11-DEC-1999;

11-DEC-1999;

11-DEC-1999;

11-DEC-1900;

22-MAR-2000;

22-MAR-2000;

21-MAR-2000;

22-MAY-2000;

28-JUL-2000;

28-JUL-2000;

28-JUL-2000;

29-JUL-2000;

29-JUL-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-AUG-2001; 2001US-00944654.
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DB; ABX75504.
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n ME, Goddar
J, Kljavin I
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99WO-US025108
99WO-US021252
99WO-US021090
99WO-US028313
99WO-US028301
99WO-US028301
99WO-US03803565
2000WO-US0035641
2000WO-US004414
2000WO-US004413
2000WO-US014042
2000WO-US014042
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A, Godowski
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i PJ, Grimaldi JC, Gurney
, Roy MA, Tumas D, Wood V
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New isolated PRO polypeptide and encoding nucleic acid, useful for the diagnosis and treatment of disorders associated with the PRO polypeptisuch as AIDS, cancer, atherosclerosis, inflammatory disease and diabet

and diabetes

Claim 12; Fig 32; 178pp; English

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The invention relates to an isolated PRO polypeptide (a'secreted or, CC transmembrane protein) comprising: (a) at least 80% sequence identity or CC positives when compared to any of 15 sequences, fully defined in the Specification, lacking or with its associated signal peptide; or (b) at CC cleast 80% sequence identity to a sequence encoded by the full-length CC coding sequence of a DNA deposited in the American Type Culture CC comprising: (a) at least 80% sequence encoded by the full-length CC comprising: (a) at least 80% sequence identity to a nucleotide sequence that encodes a PRO protein; (b) at least 80% sequence lentity to a nucleotide sequence or full-length coding sequence with any of 15 fully defined sequences of 957-3441 base pairs, given in the specification; or (c) at least 80% sequence identity to a full-length coding sequence of a CC DNA deposited under ATCC Accession No. 209526, 209529, 209524, 209528, CC 209530, 209523, 209492, 209531, 209531, 209529, 209524, 209528, CC 209531 or 209619; (2) a vector comprising the nucleic acid; (3) a host CC cell comprising the vector which, when cultured under conditions suitable for expression of the PRO polypeptide, produces the PRO protein; (4) a CC chimeric molecule comprising PRO fused to a heterologous amino acid sequence; and (5) an anti-PRO antibody. The methods and compositions of the present invention are useful for the diagnosis and treatment of disorders associated with the PRO polypeptide, such as AIDS (acquired compositions), cancer, atherosclerosis, inflammatory cdisease, diabetic complications, cardiac injury and organ failure. The biological assays. The present sequence represents a PRO protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 431; Conservative 0;
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DYLINGIYVDI 431
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                                                                                                                                         EASPGSSSQGSVPENQYGLPFEKWLLIGSLLFGVLFLVIGLVLLGRILSESLRRKRYSRL
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                                                                                                            EASPGSSSQGSVPENQYGLPFEKWLLIGSLLFGVLFLVIGLVLLGRILSESLRRKRYSRL
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Pred. No. 3.6e-173;
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RESULT 8 ABU58114

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AXU

ABU58114;

ABU58114 standard; protein; 431 AA.

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17-JUN-1998
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18-JUN-1998
18-JUN-1998
18-JUN-1998
19-JUN-1998
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16-JUN-1998;
17-JUN-1998;
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10-JUN-1998;
10-JUN-1998;
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04-JUN-1998;
04-JUN-1998;
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02-JUN-1998;
02-JUN-1998;
02-JUN-1998;
02-JUN-1998;
03-JUN-1998;
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20-MAR-1998;
28-APR-1998;
07-MAY-1998;
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12-NOV-1997;
13-NOV-1997;
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10-JUN-1998;
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17-OCT-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; PRO; cytostatic; tumour; cancer; breast; lung; stomach; liver; horse; cow; dog; cat; sheep; pig; goat; rabbit; ADEPT; antibody-dependent enzyme mediated prodrug therapy.
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98US-0088029P.
98US-0088030P.
98US-0088033P.
98US-0088167P.
98US-0088212P.
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3-0088212P

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Best Local Similarity 100
Matches 431; Conservative
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31-AUG-1998
11-SEP-1998
17-SEP-1998
17-SEP-1998
01-DEC-1998
02-JUN-1999
02-JUN-1999
12-MAR-1999
07-JUL-1999
17-AUG-1999
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17-AUG-1999
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                                                                                                         TDFPSLTRNLFSQELPQEDSLLHGQFSQAVTPLAHHHTDYSKPTDISWRDTLSQKFGSSD
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                                                                                                                                                                                                                                                            MFFGGEGSLTYTLVIICFLTLRLSASQNCLKKSLEDVVIDIQSSLSKGIRGNEPVYTSTQ
 TPKPATLLPTNASVTPSGTSQPQLATTAPPVTTVTSQPPTTLISTVFTRAAATLQAMATT
                                   98US-0097986P
98US-0098525P
98US-0100634P
98US-0100858P
98US-0100858P
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98US-0113296P
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99US-0141037P
99US-014598P
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99US-014563P
99US-014563P
99US-0158663P
                                                                                                                                                                                                                                                                                                                                   .0%; Score 2211; DB 6;
.0%; Pred. No. 3.6e-173;
0; Mismatches 0;
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RESULT RESULT
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17-OCT 1997
05-NOV-1997
12-NOV-1997
13-NOV-1997
24-NOV-1997
25-FEB-1998
26-APR-1998
27-MAY-1998
07-MAY-1998
07-JUN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; PRO; hypertrophy of neonatal heart; angiogenesis; wound healing; cardiac insufficiency disorder; cancer; tumour; immune response; adrenal cortical capillary endothelial growth; c-fos induction; vascular endothelial growth factor inhibition; VEGF inhibition; endothelial cell growth inhibitor; T-lymphocytes stimulation; retinal neurons cell survival; rod photoreceptor cell survival; retinal disorder; retinitis pigmentosum; kidney disorder; mammalian kidney mesangial cell proliferation; Berger disease; chondrocyte redifferentiation; sports injury; arthritis.
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97US-0065111P-
97US-0065710P-
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98US-0075945P-
98US-0083322P-
98US-0087607P-
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17-SEP-1998
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02-JUN-1999
15-SEP-1999
10-DEC-1999
01-DEC-1999
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Ashkenazi A
Ferrara N,
Grimaldi JC
Roy MA, St
Zhang Z;
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10-JUN-1998;
10-JUN-1998;
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                                                                                                                                  GENENTECH INC.
                      i AJ, Baker KP, Botstein D, Desnoyers L, Ea
N, Fong S, Gerber H, Gerritsen ME, Goddad
JC, Gurney AL, Kljavin IJ, Napier MA, Pan
Stewart TA, Tumas D, Watanabe CK, Williams
                                                                                                                                                                      98US-0088734P

98US-0088734P

98US-008874P

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98US-0089653P

98US-008969

98US-0
                                                                                     Eaton
                      P J A
                        Paoni
Wood
                                                                                     ħ,
                                                                   Godowski
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CC polypeptides are useful in detecting PRO polypeptide. The PRO CC polypeptides are useful in detecting PRO polypeptides in a sample, in CC linking a bioactive molecule to a cell expressing a PRO polypeptide, and CC in modulating at least one biological activity of a cell expressing a PRO polypeptide, and CC useful for treating cardiac insufficiency disorders. PRO1184 and PRO1186 CC stimulate adrenal cortical capillary endothelial growth, and PRO1186 CC PRO343, PRO828, PRO826, PRO1068 or PRO535, PRO826, PRO8197, PRO1186 CC PRO343, PRO828, PRO826, PRO1068 or PRO535, PRO826, PRO819, PRO1128, CC PRO343, PRO828, PRO826, PRO1068 or PRO535, PRO826, PRO819, PRO1128, CC PRO343, PRO828, PRO826, PRO1068 or PRO535, PRO826, PRO819, PRO1128, CC PRO343, PRO828, PRO8137 induce c-fos in endothelial cells, and are thus useful for treating conditions or disorders where angiogenesis would be beneficial, e.g. wound healing and antagonist of this polypeptide are condothelial growth factor (VEGP) stimulated proliferation of endothelial cells growth in the properties of the properties of the properties of the properties of the proliferation of cells, PRO1346, PRO1346,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Simi
Matches 431;
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EASPGSSSQGSVPENQYGLPFEKWLLIGSLLFGVLFLVIGLVLLGRILSESLRRKRYSRL
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Pred. No. 3.6e-173;
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PR 11--U

PR 28-AW

PR 28-AW

PR 28-AW

PR 28-AW

PR 11--U

PR 04--U

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04-JUN-1998;
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25-FEB-1998;
20-MAR-1998;
20-APR-1998;
07-MAY-1998;
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17-OCT-1997;
05-NOV-1997;
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11-JUN-1998;
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12-JUN-1998;
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10-JUN-
                                                                                         10-JUN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cancerous tumour; immune response; retinal disorder; sight lo retinitis pigmentosum; age-related macular degeneration; AMD; kidney disorder; Berger disease; nephropathy; dermatitis; her Crohn's disease; sports injury; arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; PRO; secreted protein; transmembrane protein; cardiac insufficiency disorders; angiogenesis; wound
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97US-0062250P.
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The invention discloses isolated PRO secreted/transmembrane polypeptides CC comprising a sequence without signal peptide and the nucleic acid CC encoding them. The polypeptides can be used to raise antibodies that CC specifically bind to the PRO polypeptide, for linking a bioactive cone biological activity of a cell. The PRO polypeptide or modulating at least CC one biological activity of a cell. The PRO polypeptides or polymentides are also useful in gene therapy, in chromosome CC polypucleotides are useful as molecular markers for protein electrophoresis, and the isolated nucleic acids may be used for recombinantly expressing CC those markers. The PRO polypeptides and nucleic acids may be used in diagnostic assays for tissue typing. Anti-PRO antibodies are useful in diagnostic assays for CC PRO, and in affinity purification of PRO from recombinant cell culture or natural sources. The sequences presented in ABU60478-ABU60624 are the PRO CC polynucleotides of the invention. Note: The sequence data for this patent CC is also available in electronic format from USPTO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 431; Conserv
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Grimaldi JC; Guri
Roy MA, Stewart '
Zhang Z;
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                      DYLINGIYVDI 431
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TC; Gurney A
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AL, Kljavin IJ, Napier MA, Pan
Tumas D, Watanabe CK, Williams
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17-OCT-1997;
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98US-0089553P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein;
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The present invention relates to the isolation of novel human PRO polypeptides, and the polynucleotide sequences encoding them. The PRO polypeptides are secreted and transmembrane proteins. The PRO polypeptides are useful for detecting other PRO polypeptides, for linking bioactive molecules to cells expressing PRO polypeptides, for modulating biological activities of cells expressing PRO polypeptides, and for for dentifying agonists or antagonists. The polynucleotide sequences encoding PRO polypeptides are useful as hybridisation probes, in the generation of antisense RNA and DNA, chromosome and gene mapping, in the generation of antisense RNA and DNA, in the preparation of PRO polypeptides, for generating transgenic animals or knockout animals, to construct hybridisation probes for mapping the gene which encodes the PRO polypeptide, and for the genetic analysis of individuals with genetic disorders, in gene therapy, for chromosome clentification, as chromosome markers, and for generating probes for PCR, Northern analysis, Southern analysis and western analysis. ABU13860-ABU14006 represent the human PRO polypeptides of the invention. Note: The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-JAN-1999

08-MAR-1999

15-SEP-1999

15-SEP-1999

30-NOV-1999

16-DEC-1999

16-DEC-1999

20-DEC-1999

20-DEC-1999

20-DEC-1999

20-DEC-1999

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20-DEC-1999

20-DEC-1999

20-DEC-1999

20-MAR-2000

24-FEB-2000

24-FEB-2000

24-FEB-2000

24-FEB-2000

24-FEB-2000

25-MAR-2000

26-MAR-2000

27-MAY-2000

27-MAY-2000

28-JUL-2000

29-AUG-2000

21-DEC-2000

21-DEC-2000

21-DEC-2000

21-JUN-2001

21-JUN-2001
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Grimaldi
Roy MA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Zhang
                                                                                                                                                                                                                                                                                                                                                            Novel secreted and transmembrane polypeptide for modulating biological activity of cell expressing the polypeptide, identifying agonists or antagonists of polypeptide, and as molecular weight markers.
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N-PSDB; ABX64297.
                                                                                                                                                                                                                                                                                                                           Claim 12; Fig 328; 649pp; English.
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N.
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99WO-US01252.
99WO-US01252.
99WO-US021547.
99WO-US02831.
99WO-US02831.
99WO-US02831.
99WO-US03095.
99WO-US03095.
99WO-US03095.
99WO-US03095.
12000WO-US003414.
12000WO-US004914.
12000WO-US004914.
12000WO-US004914.
12000WO-US00684.
12000WO-US00684.
12000WO-US006814.
12000WO-US006814.
12000WO-US0061358.
12000WO-US013358.
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12000WO-US014941.
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Gerber H, Gerritsen ME, Goddard
AL, Kljavin IJ, Napier MA, Pan
Tumas D, Watanabe CK, Williams
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Paoni NF;
Wood WI;
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RESULT 13
ABUG0244
ID ABUG0
XX ABUG0
XX ABUG0
XX APG0
XX 1010
XX Human
XX Human
XX infla
KW infla
KW acqui
KW acqui
KW anti-
XX Indo
XX 10200
XX 103-DE
PR 11-DE
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03-DEC-1997;
11-DEC-1997;
11-DEC-1997;
11-DEC-1997;
11-DEC-1997;
12-DEC-1997;
16-DEC-1997;
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from the
                                                                                                                                                                                Human; PRO; secreted polypeptide; transmembrane polypeptide; inflammatory disease; atherosclerosis; cardiac injury; AIDS; birth defect; premature aging; diabetes; dog; cat; horse; acquired immunodeficiency syndrome; cow; sheep; pig; goat; raindustry; cytostatic; antiinflammatory; cardiant; antiinfertianti-HIV; antiarteriosclerotic; antidiabetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                   31-AUG-2001;
                                                                                                                                                                                                                                                                                          24-APR-2003
                                                                                                                                                                                                                                                                                                                  ABU60244;
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                                                                                                                                   US2002132768-A1
                                                                                                                                                         Homo sapiens.
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                                                                                                                                                                                                                                                                   polypeptide
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                                                                                   2001US-00945015
                                                                                                                                                                                                                                                                                           (first
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 97US-
97US-
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97US-
                                    S-0067411P.
S-0069278P.
S-0069334P.
                                                                                                                                                                                                                                                                                                                                       protein,
  3-0069335P.
3-0069425P.
3-0069694P.
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Pred. No. 3.6e-173;
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antiinfertility;
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                                                                                                                                                                                                                                cancer;
infertility;
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180

360

300

420 360

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Best Local S
Matches 431
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16-DEC-1997; 97US-0069702P.
17-DEC-1997; 97US-0069870P.
18-DEC-1997; 97US-0069870P.
18-DEC-1997; 97US-0068017P.
05-TAN-1998; 98US-0074086P.
09-FEB-1998; 98US-0074086P.
09-FEB-1998; 98US-00759458.
16-DEC-1998; 98US-00216021.
16-DEC-1998; 98US-00216021.
16-DEC-1998; 98US-00216021.
16-DEC-1998; 98US-00216510.
16-DEC-1998; 98US-00254311.
22-DEC-1998; 98US-00254311.
22-DEC-1998; 99US-00254311.
23-UUL-1999; 99US-00254311.
23-UUL-1999; 99US-00254311.
23-UUL-1999; 99WO-US0228409.
01-DEC-1998; 99WO-US021090.
01-DEC-1998; 99WO-US021090.
01-DEC-1999; 99WO-US021090.
01
                                                                                                                                                                                                                                                          The invention relates to a human secreted and transmembrane polypeptide (PRO) and the polynucleotide encoding it. The PRO polypeptide or polynucleotide is useful in pharmaceuticals, diagnostics, biosensors or bioreactors. These are particularly useful for detecting or treating cancers, inflammatory diseases, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, acquired immunodeficiency syndrome (AIDS) and diabetic complications in mammals, e.g. humans, dogs, cats, cattle, horses, sheep, pigs, goats or rabbits. The sequences are also useful in biotechnological and medical research and in various industrial applications. Sequences ABU60230-ABU60245 represent human PRO polypeptides of the invention
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Gerritsen M
Hillan KJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New secreted and transmembrane polypeptides (e.g. PRO241, for use in pharmaceuticals, diagnostics or bioreactors, particularly for detecting or treating e.g. cancers, infertility or acquired immunodeficiency syndrome in mammals.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-174088/17.
N-PSDB; ABX89495.
                                                                                                                                                                                                                              Sequence 431 AA;
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                                                                                                        μ
                                                                                                                                                                     Similarity
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J. Kljavin
EDCINSCCSTKNISGDKACNLMIFDTRKTARQPNCYLFFCPNEEACPLKPAKGLMSYRII
                                                             MFFGGEGSLTYTLVIICFLTLRLSASQNCLKKSLEDVVIDIQSSLSKGIRGNEPVYTSTQ
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ME, Goddard /
Kljavin IJ,
                                                                                                                                              100.0%; ilarity 100.0%; Conservative 0
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A, Godowski PJ, Grimaldi JC, Gurn
Napier MA, Roy MA, Tumas D, Woo
                                                                                                                                                <u>.</u>
                                                                                                                                              Score 2211; DB 6;
Pred. No. 3.6e-173;
Mismatches 0;
                                                                                                                                                                                      Length
                                                                                                                                                Indels
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Wood WI;
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RESULT 14
ABU72590
ID ABU72590
ID ABU72
XX ABU72
XX ABU72
XX ABU72
XX ABU72
XX Human
XW Viruc
KW PRO;
KW Cance
KW Lymph
KW drug
OS Homo
XX US200
XX 15-N0
PR 113-N0
PR 117-OC
PR 113-N0
PR 12-N1
PR 28-N1
                 16-JUN-1997
17-OCT 1997
05-NOV 1997
12-NOV 1997
13-NOV 1997
24-NOV 1997
25-FEB-1998
26-APR 1998
27-MAY 1998
28-APR 1998
07-MAY 1998
02-JUN-1998
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02-JUN-1998
04-JUN-1998
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04-JUN-1998
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04-JUN-1998
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97US-0065311P.
97US-0066770P.
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97US-0062250P.
97WO-US020069.
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15-SEP 1999
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17-MAY 2000
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2000WO-US033578

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(GETH ) GENENTECH INC.
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Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton Ferrara N, Fong S, Gerber H, Gerritsen ME, Goddard A, Grimmaldi JC, Gurney AL, Kljavin IJ, Napier MA, Pan J, Roy MA, Stewart TA, Tumas D, Watanabe CK, Williams PM, 2 Paoni Wood PJ;

N-PSDB; 2003-352829/33. DB; ACA64519.

New genes PRO184), u Barcoma, s and secreted and transmembrane polypeptides (e.g. PRO183 or useful for treating or diagnosing e.g. ovarian cancer, Kaposi leukemia, lymphoma, hepatitis B, multiple sclerosis or Crohn' 0

Claim 12; 663pp; English.

The invention describes a new isolated nucleic acid molecule comprising the full length coding sequence of the DNA deposited with the American CType Culture Collection (e.g. ATCC Deposit NO. 209521, 552-PTA, 819-PTA, CC 209439, 203135, etc); or a sequence with at least 80% identity to a DNA CC encoding a PRO polypeptide. The PRO polypeptides or polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or bioreactors. These CC encers (e.g. ovarian cancer, colorectal cancer, Kaposi's sarcoma, CC encers (e.g. ovarian cancer, colorectal cancer, Kaposi's earcoma, CC disease in mammals. The PRO polypeptides are useful in drug screening, CC particularly as targets for therapeutic intervention in these diseases, CC end in the diagnostic determination of the presence of these diseases. CC The PRO polypeptides are also useful as molecular weight markers, or for CC chromosome identification. The PRO genes are useful as hybridisation CC probes, or for screening libraries of human cDNA, genomic DNA or mRNA. CC The PRO genes may also be used in gene therapy, particularly for creplacing a defective gene. This is the amino acid sequence of a novel buman correted and transmembrane pon columnatida. secreted and transmembrane PRO polypeptide

Sequence 431 ₽ ,

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TDFPSLTRNLPSQELPQEDSLLHGQFSQAVTPLAHHHTDYSKPTDISWRDTLSQKFGSSD
                                EASPGSSSQGSVPENQYGLPFEKWLLIGSLLFGVLFLVIGLVLLGRILSESLRRKRYSRL
                                           EASPGSSSQGSVPENQYGLPFEKWLLIGSLLFGVLFLVIGLVLLGRILSESLRRKRYSRL
                                                                       AVLTITEQAPTDSKGSLETIPETEISNLTLNIGNVYNPTALSMSNVESSTMNKTASWEGR
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                                                                                                                                                                                                                                                                                                                           nilarity 100.
Conservative
                                                                                                                                                                                                                                                                                                                            .0%; Score 2211; DB 6; .0%; Pred. No. 3.6e-173; 0; Mismatches 0;
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DYLINGIYVDI 431

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16-SEP-1998
16-DEC-1998
22-DEC-1998
22-DEC-1998
22-UN-1999
28-UUL-1999
30-NOV-1999
30-NOV-1999
31-EC-1999
11-EC-1999
11-EC-1999
11-EB-2000
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22-FEB-2000
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23-WAY-2000
25-WAY-2000
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28-FEB-2000
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09-FEB-1998;
25-FEB-1998;
                                            Baker KP,
Gerritsen
Hillan KJ,
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12-DEC-1997;
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16-DEC-1997;
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Cornelia de Lange syndrome; gene therapy; immune disorder;
inflammatory disease; organ failure; atherosclerosis; cardiac injury;
infertility; birth defect; premature aging; cardiac injury; AIDS; cancer;
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                2003-311003/30.
DB; ABX96832.
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                                                      Botstein D,
ME, Goddard
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2000WO-US005841.

2000WO-US005843.

2000WO-US008439.

2000WO-US014042.

2000WO-US020711.

2000WO-US032678.

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2001US-00866028.
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99US-0146222P
99WO-US0281090
99WO-US028313
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Napier MA, Roy
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                                           Ferrara N, Filvaroff E;
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, Roy MA, Tumas D, Woo
                                            Gurney AL; Wood WI;
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CC transmembrane polypeptide (designated as PRO proteins). 15 PRO
CC polypeptides and their encoding polypucleotides are disclosed. Also
CC included are a vector comprising the PRO nucleic acid, a host cell
CC comprising the vector, a process for producing a PRO polypeptide (by
CC culturing the host cell under conditions for the expression of the PRO
CC polypeptide, and recovering the PRO polypeptide from the cell culture, an
CC isolated polypeptide having at least 80% amino acid sequence identity to
CC the PRO polypeptides, a chimaeric molecule comprising PRO fused to a
CC the PRO polypeptides, a chimaeric molecule comprising PRO fused to a
CC the PRO. The PRO nucleotide sequences are useful as hybridisation probes,
CC in chromosome and gene mapping, in generating sense and antisense RNA or
CC the development and screening of therapeutically useful reagents, and in
CC the development and screening of therapeutically useful reagents, and in
CC gene therapy. The polypeptides may be used as molecular weight markers
CC for protein electrophoresis purposes. The PRO polypeptides and nucleic
CC acids may also be used for chromosome identification, and tissue typing.
CC syndrome. Other PRO proteins are variously implicated in immune
CC disorders, inflammatory disease, organ failure, atherosclerosis, cardiac
CC injury, infertility, birth defects, premature aging, cardiac injury,
CC a PRO accer and diabetic complications. The present sequence represents
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Best Local Similarity
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New transmembrane polypeptides and polynucleotides useful for chromosome

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                                                                                                                                                                                                                                                                                                                              SCORE
STDEV
                                                                                                                                                                                                                                                      Similarity matrix
Mismatch penalty
Gap penalty
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query sequence being compared:US-09-944-929-83 (1-431)
Number of sequences searched: 11
Number of scores above cutoff: 11
Sequence Name
                                                        The scores below are sorted by initial score. Significance is calculated based on initial score.
                                                                                                                                                   Times:
                                                                                                                                                                                 Scores:
                                                                                                                                                                                                                        Randomization group
                                                                                                                                                                                                                                   Gap size penalty
Cutoff score
                                     100% identical
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                                                                                                residues:
sequences searched:
scores above cutoff:
                                   sequences to the query sequence were found:
      Description
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                                                                                                                                        CPU
00:00:00.00
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353
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0.05
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Joining penalty
Window size
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432
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11
11
                                                                                                                                                                    Standard Deviation 172.12
                                                                                                                                        Total Elapsed 00:00:01.00
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Length Score Score
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431
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      Sig. Frame
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AAB34739.PEP			ABU59192.PEP	ABU60623.PEP	ABU64930.PEP	ABU72590.PEP	ABU82704.PEP	ADE71552.PEP	
Human	Human	Novel	Novel	Human	Human	Novel	Human	Human	
AAB34739.PEP Human secreted protein encode	secreted/transmembrane	human secreted protein	human secreted or trans	secreted/transmembrane	secreted/transmembrane	human secreted and tran	secreted/transmembrane	secreted/transmembrane	
431	431	431	431	431	431	431	431	431	
431	431	431	431	431	431	431	431	431	
431	431	431	431	431	431	431	431	431	
0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	
0	0	0	0	0	0	0	0	0	

The list of other best scores is:

**** 2 standard deviations 1 10. AAM25899.PEP TOIG of: aam25899 check: 599 11. AAB92667.PEP TOIG of: aab92667 check: 542	Sequence Name Description Length Score Score Sig. Frame
**** 2 BI EP TOIG of: au EP TOIG of: au	Description
tandard de am25899 c ab92667 c	; ; ; ; ; ; ;
**** 2 standard deviations below mean **** TOIG of: aam25899 check: 599 633 6 TOIG of: aab92667 check: 542 418 5	F.
low mean * 633 418	Init Opt. Length Score Score Sig. Frame
*** 6 66 5 67	Init. Opt. Score Score
66 -2.02 67 -2.02	Sig. F
00	rame

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US-09-944-929-83 (1-431)
ADE71552.PEP Human secreted/transmembrane PRO polypeptide #15.

TOIG of: ade71552 check: 2687 from: 1 to: 431

ADE71552 standard; protein; 431 AA.

ADE71552;

29-JAN-2004 (first entry)

Human secreted/transmembrane PRO polypeptide #15

human; sports-related joint problem; articular cartilage defect; osteoarthritis; rheumatoid arthritis; cancer; PRO; secreted protein; transmembrane protein.

Homo sapiens

US2003096742-A1

22-MAY-2003.

03-DEC-1997; 30-AUG-2001; 2001US-00943780

L1-DEC-1997

18-DEC-1997; 05-JAN-1998; 09-FEB-1998; 09-FEB-1998; 12-DEC-1997; 16-DEC-1997; 16-DEC-1997; 16-DEC-1997 17-DEC-1997 17-DEC-97US-S-0069696P. S-0069702P. S-0069870P. -0069873P.

25-FEB-1998 16-SEP-1998 98WO-US025108. 98US-0112850P. 98US-0113296P. S086 S086 98US-0075945P 98WO-US019330

0074092P

01-DEC-1998 16-DEC-1998 22-DEC-1998 02-JUN-1999 15-SEP1999 30-NOV-1999 30-NOV-1999 30-NOV-1999 11-DEC-1999 11-FEB-2000 22-FEB-2000 99WO-US012252 99US-0146222P 99WO-US021090 99WO-US028313 99WO-US028409 99WO-US028301 99WO-US030095 2000WO-US03095

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Initial Score
Residue Identity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADE71552
150 160 170 180 190 200 210

OFSQAVTPLAHHHTDYSKPTDISWRDTLSQKFGSSDHLEKLFKMDEASAQLLAYKEKGHSQSSQFSSDQEIA
                                                                                                                                                                                                                                          80 100 110 120 130 ISGDKACNLMIFDTRKTARQPNCYLFFCCNEEACPLKPAKGLMSYRIITDFPSLTRNLPSQBLPQBDSLHG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                02-MAR-2000; 2000WO-US005841.
30-MAR-2000; 2000WO-US008439.
22-MAY-2000; 2000WO-US014042.
28-JUL-2000; 2000WO-US020710.
01-DEC-2000; 2000WO-US02678.
28-FEB-2001; 2001WO-US006520.
25-MAY-2001; 2001US-00866028.
                                                                                                                                                               QFSQAVTPLAHHTDYSKFTDISWRDTLSQKFGSSDHLEKLFKMDEASAQLLAYKEKGHSQSSQFSSDQETA
150 160 170 180 190 200 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Baker KP,
Gerritsen I
Hillan KJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to isolated nucleic acids and their encoded PRO proteins. The PRO polypeptides are useful in diagnosing and treating a condition that is responsive to the PRO polypeptide, e.g., in the treatment of sports-related joint problems, articular cartilage defects, osteoarthritis, rheumatoid arthritis and cancer. The PRO polypeptides are also useful in identifying agonists antagonists of the PRO polypeptide. The nucleic acid is useful as hybridisation probe, in chromosome and gene mapping, and in the generation of anti-sense RNA and DNA. The present sequence represent the maino acid sequence of a human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         organ failure, atheroscles
acquired immunodeficiency
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   secreted/transmembrane PRO polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length: 431 September 30,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RO polypeptide for diagnosing or treating failure, atherosclerosis, cardiac injury, red immunodeficiency disease, Alzheimer's
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n ME, Goddard I
J, Kijavin IJ,
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100%
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A, Godowski
Napier MA,
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                                                                                                                                                                                                                                                                                                                                                                                                           Substitutions
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i PJ, Grimaldi JC, Gu
, Roy MA, Tumas D, V
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431 Mismatches
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Wood WI;
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US-09-944-929-83 ABU82704.PEP Huma Human (1-431)secreted/transmembrane protein

TOIG of: abu82704 check: protein; 431 AA. 2687 from: بر . 6

ABU82704;

ABU82704 standard;

26-JUN-2003 (first entry)

Human secreted/transmembrane protein PR0361

Human; PRO; secreted protein; transmembrane protein; cardiac insufficiency disorders; angiogenesis; wound healing; cancerous tumour; immune response; retinal disorder; sight loc retinitis pigmentosum; age-related macular degeneration; AMD; kidney disorder; Berger disease; nephropathy; dermatitis; herg Crohn's disease; sports injury; arthritis. l healing; herpetiformis;

Homo sapiens

US2003032023-A1

14-NOV-2001; 2001US-00990711. 97US-0049787P

05-NOV-1997 13-NOV-1997 13-NOV-1997 24-NOV-1997 24-NOV-1997 24-NAY-1998 20-MAY-1998 20-MAY-1998 02-JUN-1998 02-JUN-1998 03-JUN-1998 04-JUN-1998 05-JUN-1998 05-JUN 97US-0065186P 97US-0066311P 97US-0066770P 98US-0075945P 98US-0084600P 98US-0087607P 98US-0087607P 98US-0087607P 98US-008762P 98US-0088025P 98US-0088025P 98US-0088025P 98US-0088033P 98US-0088033P 98US-0088137P 98US-008813P 98US-008815P 98US-008815P 98US-008815P 98US-008815P 98US-008815P 97WO-US020069

04-AUG-1998; 98US-0 10-AUG-1998; 98US-0 10-AUG-1998; 98US-0 10-AUG-1998; 98US-0 11-AUG-1998; 98US-0 11-AUG-1998; 98US-0 17-AUG-1998; 98US-0	02-JUL-1998; 98US-0 02-JUL-1998; 98US-0 02-JUL-1998; 98US-0 02-JUL-1998; 98US-0 02-JUL-1998; 98US-0 07-JUL-1998; 98US-0	-JUN-1998; 98US-0	16-JUN-1998; 98US-0 16-JUN-1998; 98US-0 16-JUN-1998; 98US-0 17-JUN-1998; 98US-0 18-JUN-1998; 98US-0 18-JUN-1998; 98US-0 19-JUN-1998; 98US-0 19-JUN-1998; 98US-0 22-JUN-1998; 98US-0 22-JUN-1998; 98US-0 22-JUN-1998; 98US-0 22-JUN-1998; 98US-0 23-JUN-1998; 98US-0 23-JUN-1998; 98US-0 23-JUN-1998; 98US-0 23-JUN-1998; 98US-0 23-JUN-1998; 98US-0
095325 095325 095929 096112 096143 0967329 096776 096776 096771	091628 091628 091633 091673 091674 091978 092482 0953472 095301	0090429P. 0090429P. 0090435P. 0090435P. 0090444P. 0090535P. 0090542P. 0090542P. 0090576P. 0090576P. 0090578P. 0090598P. 0090659P. 0090659P. 0090659P. 0090659P. 0090659P. 0090659P.	00000000000000000000000000000000000000
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WO-US013 WO-US014 WO-US014 WO-US015 US-02136 US-02136 WO-US020 WO-US023 WO-US023 WO-US033 WO-US033 WO-US033 WO-US033 WO-US033 WO-US033	99WO-USC288 99WO-USC288 99WO-USC288 99WO-USC300 00WO-USC000 00WO-USC000 00WO-USC000 00WO-USC004 000WO-USC004 000WO-USC004 000WO-USC004 000WO-USC004	98US-0098014P. 98US-0098024P. 98US-0109824P. 98US-0100858P. 98WO-US019437. 98WO-US021141. 98WO-US025108. 98WO-US025108. 99WO-US00106. 99WO-US00106. 99WO-US001252. 99US-0141037P. 99US-0141037P. 99US-0141037P. 99US-0145698P. 99US-0145698P. 99US-0146222P. 99US-0146222P. 99US-0146232P. 99WO-US021547. 99WO-US021633.	US-009689 US-009699 US-009699 US-009699 US-009699 US-009791 US-009791 US-009799 US-009799 US-009799 US-009799 US-009799

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Residue
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| Note: The content of the con
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Grimaldi JC,
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29-JUN-2001; 2001WO-US021066.
09-JUL-2001; 2001WO-US021735.
28-AUG-2001; 2001US-00941992.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New isolated PRO polypeptides e.g., PRO PRO1375, which stimulate proliferation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Roy MA,
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Identity
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80
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DB; ACA69380.
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Gurney
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90
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Matches
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Gerber H, Gerritsen ME, Goddard
AL, Kljavin IJ, Napier MA, Pan
Tumas D, Watanabe CK, Williams
                                                                                                                                       Conservative
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                                                                                                                                                                        Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         e.g., PRO826, PRO1068, PRO1184, PRO1346 feration of stimulated T-lymphocytes and enhancing an immune response.
                                                                                                                                       Substitutions
                                                                                                                                                                                                            08:12
                                                                                                                                                         n 11
                                                                                                                                                                                                        Type: P
                                                                                                                                                     Significance
Mismatches
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Paoni NF;
Wood WI;
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290
                                                                                                       EASPGSSSQGSVPENQYGLPFEKWLLIGSLLFGVLFLVIGLVLLGRILSESLRRKRYSRLDYLINGIYVDI
370 380 390 400 410 420 430
                               370 380 390 400 410 420 X
EASPGSSSQGSVPENQYGLPEKWLLIGSLLFGVLFLVIGLVLLGRILSESLRKKRYSRLDYLINGIYVDI
                                                                                                                                                                                                                                          ÓFSÓAVTPLÁHHTDYSKPTDISWRDTLSÓKFGSSDHLEKLFKMDEASAQLLAYKEKGHSQSSÓFSSDQEIA
150 160 170 180 190 200 210
                                                                                                                                                                                                                                                                                                                                                                               QFSQAVTPLAHHHTDYSKPTDISWRDTLSQKFGSSDHLEKLFKMDEASAQLLAYKEKGHSQSSQFSSDQEIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ISGDKACNÍMIFDTRKTÁRÓPNCYLFFCPNEBÁCPLKBÁKGLMSYRIITDFPSJTRNILFSQELFGEDSLÍHG
80 90 100 110 120 130 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | SGDKACNLMIFDTRKTARQPNCYLFFCPNEEACPLKPAKGLMSYRIITDFPSLTRNLPSQELPQEDSLLHG
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                                                                                                                                                                                                                                                                                                                                                                                                                     160
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US-09-944-929-83 (1-431) ABU72590.PEP Novel human human secreted and transmembrane protein

ABU72590 standard; protein;

TOIG of: abu72590 check:

2687

from:

ب 6

(first entry)

Novel human secreted and transmembrane protein

virucide; hepatotropic; antiinflammatory; neuroprotective; gene therapy; PRO; pharmaceutical; diagnostic; biosensor; bioreactor; malignancy; cancer; ovarian cancer; colorectal cancer; Kaposi's sarcoma; leukaemia; Human; secreted and transmembrane B; multiple sclerosis; Crohn's disease; protein; cytostatic;

ymphoma; screening. hepatitis

02-JAN-2003

19-NOV-2001; 2001US-00989734

16-JUN-1997; 17-OCT 1997; 05-NOV-1997; 12-NOV-1997; 13-NOV-1997; 24-NOV-1997; 25-FEB-1998; 20-MAR-1998; 20-MAR-1998; 20-MAY-1998; 07-JUN-1998; 02-JUN-1998; 02-JUN-1998; 03-JUN-1998; 97US-0065311P 97US-0066770P 98US-0075945P 98US-0078910P 98US-0083322P 98US-0087106P 98US-0087607P 98US-0087607P 98US-0087759P 98US-0087827P. 97US-0049787P. 97US-0062250P. 97WO-US020069. 97US

04-JUN-1998 04-JUN-1998 04-JUN-1998 04-JUN-1998 04-JUN-1998 04-JUN-1998 04-JUN-1998 05-JUN-1998 05-JUN-1998 05-JUN-1998 10-JUN-1998 10-JUN-1998 10-JUN-1998 11-JUN-1998 11-JUN-1998

PJ;

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Initial
Residue
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                    ABU72590 Length: 431
                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention describes a new isolated nucleic acid molecule comprising the full length coding sequence of the DNA deposited with the American CYppe Culture Collection (e.g. ATCC Deposit No. 20962; 552-PTA, 819-PTA, CC 209439, 203135, etc); or a sequence with at least 80% identity to a DNA CE encoding a PRO polypeptide. The PRO polypeptides or polymucleotides are useful as pharmacuticals, diagnostics, biosensors or bioreactors. These CC are particularly useful for detecting or treating e.g. malignancies or cancers (e.g. ovarian cancer, colorectal cancer, Kaposi's sarcoma, CC leukaemia or lymphoma), hepatitis B, multiple sclerosis, or Crohn's CC disease in mammals. The PRO polypeptides are useful in drug screening, particularly as targets for therapeutic intervention in these diseases, and in the diagnostic determination of the presence of these diseases. CC The PRO polypeptides are also useful as molecular weight markers, or for Cromosome identification. The PRO genes are useful as hybridisation probes, or for screening libraries of human cDNA, genomic DNA or mRNA. The PRO genes may also be used in gene therapy, particularly for replacing a defective gene. This is the amino acid sequence of a novel way.
                                                                    HLLPENVSALPATVAVASPHTTSATPKPATLLPTNASVTPSGTSQPQLATTAPPVTTVTSQPPTTLISTVFT
                                                                                                                                                                                                                                           220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-JUN-2001;
20-JUN-2001;
29-JUN-2001;
09-JUL-2001;
28-AUG-2001;
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N-PSDB;
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Grimaldi
Roy MA,
Zhang Z;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New genes and secreted and transmembrane polypeptides (e.g. PRO183 or PRO184), useful for treating or diagnosing e.g. ovarian cancer, Kaposi's sarcoma, leukemia, lymphoma, hepatitis B, multiple sclerosis or Crohn's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ashkenazi AJ, Baker KP, Botstein D, Deenoyers L, Eaton
Perrara N, Pong S, Gerber H, Gerritsen ME, Goddard A,
Grimaldi JC, Gurney AL, Kljavin IJ, Napier MA, Pan J,
Roy MA, Stewart TA, Tumas D, Watanabe CK, Williams PM,
                                                                                                                                                                                                                                                                                                                                           Score Identity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (GETH )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2003-352829/33.
DB; ACA64519.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENENTECH
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Fig
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; 2001WO-US019692.
; 2001WO-US021066.
; 2001WO-US021735.
; 2001US-00941992.
                                                                                                                                                                                                                                                                                                                                                                                                                   ΑA;
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                                            240
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Matches
Conservative
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Mismatches
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Godowski PJ
, Paoni NF;
wood WI;
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0 0
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98US-0088021P
98US-0088025P
98US-0088025P
98US-0088029P
98US-0088033P
98US-0088039P
98US-0088202P
98US-0088212P
98US-0088212P
98US-0088212P
98US-0088212P
98US-0088212P
98US-0088212P
98US-0088212P
98US-0088214P
98US-0088816P
98US-00895114P
98US-0089514P
98US-0089514P
98US-0089514P
98US-0089514P
98US-0089514P
98US-0

18-JUN-1998
18-JUN-1998
18-JUN-1998
18-JUN-1998
11-SEP-1998
07-JCT-1998
07-JCT-1999
07-JUN-1999
07-JUN-1999
07-JUN-1999
07-JEC-1999
07-JEC-199

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TOIG of: abu64930
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ABU64930.PEP Human secre
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11-DEC-1997
11-DEC-1997
11-DEC-1997
11-DEC-1997
16-DEC-1997
16-DEC-1997
17-DEC-1997
17-DEC-1997
17-DEC-1997
17-DEC-1997
17-DEC-1997
17-DEC-1997
17-DEC-1998
09-FEB-1998
09-FEB-1998
16-SEP-1998
16-SEP-1998
16-SEP-1998
16-SEP-1998
16-DEC-1999
11-EEB-2000
22-FEB-2000
30-MAR-2000
30-MAR-2000
30-MAR-2000
31-MAR-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cornelia de Lange syndrome; gene therapy; immune disorder; inflammatory disease; organ failure; atherosclerosis; cardiac injury; infertility; birth defect; premature aging; cardiac injury; AIDS; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                  31-AUG-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                             21-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US2002173463-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              secreted/transmembrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRO; secreted
la de Lange syr
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97US-0067411P.
97US-0069278P.
97US-0069334P.
97US-0069335P.
97US-006994P.
97US-006996P.
97US-0069970P.
97US-0069870P.
97US-0069870P.
97US-0069870P.
97US-0069870P.
98US-0074092P.
98US-0012330.
99WO-US02330.
99WO-US02330.
99WO-US023830.
99WO-US0330095.
2000WO-US03365.
2000WO-US03841.
2000WO-US03841.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein;
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Initial Residue Gaps

Score Identity

9 II 8

431 100%

Optimized Matches

Score

0

Conservative Substitutions

11

431 Significance 431 Mismatches

0.45 0

X 10 20 30 40 50 FOR THE STATE OF THE STATE

160

170

180

190

200

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ABU64930 Length: 431
                                                                                         CC transmembrane polypeptide (designated as PRO proteins). 15 PRO polypeptides and their encoding polynucleotides are disclosed. Also included are a vector comprising the PRO nucleic acid, a host cell comprising the vector, a process for producing a PRO polypeptide (by culturing the host cell under conditions for the expression of the PRO culturing the host cell under conditions for the expression of the PRO polypeptide, and recovering the PRO polypeptide from the cell culture, an isolated polypeptide having at least 80% amino acid sequence identity to the PRO polypeptides, a chimaeric molecule comprising PRO fused to a heterologous amino acid sequence and an antibody which specifically binds to PRO. The PRO nucleotide sequences are useful as hybridisation probes, in chromosome and gene mapping, in generating sense and antisense RNA or DNA, in generating transgenic or knock-out animals which can be used in the development and screening of therapeutically useful reagents, and in gene therapy. The polypeptides may be used as molecular weight markers for protein electrophoresis purposes. The PRO polypeptides and nucleic acids may also be used for chromosome identification, and tissue typing. PRO241 (identified as Chordin) is a candidate gene for Cornelia de Lange syndrome. Other PRO proteins are variously implicated in immune constraints, inflammatory disease, organ fallure, atheroselerosis, cardiac alpury, infertility, birth defects, premature aging, cardiac injury, alpos orotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 200
N-PSDB;
                                          Sequence 431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New transmembrane polypeptides and polynucleotides useful for chromosome identification, tissue typing, gene therapy, in chromosome and gene mapping, or as molecular weight markers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28-JUL-2000; 2000WO-US020710
01-DEC-2000; 2000WO-US032678
28-FEB-2001; 2001WO-US006520
25-WAY-2001; 2001US-00866028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 12;
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DB; ABX96832.
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n ME, Goddard I
J, Kljavin IJ,
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  September 30,
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A, Godowski
Napier MA,
  2004 08:12
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PJ, Grimaldi JC, Gurn
ROY MA, Tumas D, Woo
Type: P Check: 2687
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Wood W
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TOIG of: abu60623
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ABU60623.PEP Human secreted/transmembrane
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   16-UN-1997
17-CCT-1997
05-NOV-1997
12-NOV-1997
13-NOV-1997
24-NOV-1997
25-FEB-1998
28-APR-1998
28-APR-1998
07-MAY-1998
07-UN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; PRO;
diagnostic;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US2002160384-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  secreted; transmembrane; signal peptide; pharmaceutical;
therapeutic; gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2001US-00992598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
 97US-0049787P
97US-006250P
97US-006511AP
97US-006511AP
97US-006511P
97US-0066770P
98US-0075945P
98US-0084600P
98US-008760P
98US-008760P
98US-008760P
98US-008762P
98US-008022P
98US-008022P
98US-0088021P
98US-0088023P
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98US-0088023P
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98US-0088033P
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   11-JUN-1998

11-JUN-1998

11-JUN-1998

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16-JUN-1998

16-JUN-1998

16-JUN-1998

17-JUN-1998

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18-JUN-1999

19-JUN-1999

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19-JUN-1999

10-DEC-1999

10-DEC-1999

10-DEC-1999

11-EEB-2000

11-FEB-2000

11-FEB-2000

11-FEB-2000

11-MAR-2000

11-JUN-2000

11-JUN-2000

11-JUN-2001

12-JUN-2001

12-JUN-2001
                                                                                       Ferrara N
Grimaldi
Roy MA,
                                                                                                                      Ashkenazi .
Ferrara N,
                              WPI; 2003-288106/28
N-PSDB; ABX90451.
New transmembrane polypeptides and nucleic acids encoding the
                                                                                                                                                                    (GETH
                                                                                                                                                                    _
                                                                                                                                                                      GENENTECH INC.
                                                                                       i AJ, Baker KP, Botstein D, Desnoyers L, Eaton N, Fong S, Gerber H, Gerritsen ME, Goddard A, JC, Gurney AL, Kljavin IJ, Napier MA, Pan J, Stewart TA, Tumas D, Watanabe CK, Williams PM,
                                                                                                                                                                                              98US-008885P

98US-008885P

98US-008865P

98US-0089105P

98US-0089512P

98US-008953P

98US-008953P

98US-008950P

98US-008960P

98US-008960P

98US-008960P

98US-008960P

98US-008960P

98US-008960P

98US-008960P

98US-008901P

98US-008901P

98US-008961P

99WO-US012527

99WO-US012527

99WO-US013587

99WO-US00861P

99WO-US008491P

2000WO-US008491P

2000WO-US01358P

2000WO-US01358P

2000WO-US01352P

2000WO-US01352P

2000WO-US01352P

2000WO-US03552P

2000WO-US03552P

2000WO-US03527P

2000WO-US03528

2000WO-U
                                                                                           Paoni
Wood
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W N

PJ

wound healing;

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polypeptides, useful in gene therapy, in chromosome identification, chromosome markers, or in generating probes.
650pp;
  English.
                                                                               96
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The invention discloses isolated PRO secreted/transmembrane polypeptides CC comprising a sequence without signal peptide and the nucleic acid CC encoding them. The polypeptides can be used to raise antibodies that CC specifically bind to the PRO polypeptide, for linking a bioactive CC molecule to a cell expressing a PRO protein and for modulating at least CC one biological activity of a cell. The PRO polypeptides or CC polypucleotides are also useful in gene therapy, in chromosome CC identification, as chromosome markers, or in generating probes. The PRO CC polypeptides are useful as molecular markers for protein electrophoresis, CC and the isolated nucleic acids may be used for recombinantly expressing CC those markers. The PRO polypeptides and nucleic acids may also be used in tissue typing. Anti-PRO antibodies are useful in diagnostic assays for CC natural sources. The sequences presented in ABU60478-ABU60624 are the PRO CC polypucleotides of the invention. Note: The sequence data for this patent CC is also available in electronic format from USPTO at

Sequence 431 AA;

Residue Gaps Initial

Score Identity

ti

431 0

Optimized Matches

Score

n IJ

Conservative Substitutions

11 II

0.45

100%

ABU60623 Length: 431 September 30, 2004 08:12 431 Significance = 431 Mismatches = Type: P Check: 2687

US-09-944-929-83 (1-431)
ABU59192.PEP Novel human secreted or transmembrane protein PRO3

TOIG of: abu59192 check: 2687 from: ۳ . 0

25-RB-1998;
26-APR-1998;
28-APR-1998;
28-APR-1998;
28-APR-1998;
28-APR-1998;
28-WAY-1998;
28-WAY 05-NOV-1997; 12-NOV-1997; 13-NOV-1997; 24-NOV-1997; Human; PRO; hypertrophy of neonatal heart; angiogenesis; wound healing cardiac insufficiency disorder; cancer; tumour; immune response; adrenal cortical capillary endothelial growth; C-fos induction; vascular endothelial growth factor inhibition; VEGF inhibition; endothelial cell growth inhibitor; T-lymphocytes stimulation; retinal neurons cell survival; rod photoreceptor cell survival; retinal disorder; retinitis pigmentosum; kidney disorder; mammalian kidney mesangial cell proliferation; Berger disease; dermatitis; herpetiformis; Crohn's disease; chondrocyte proliferation; sports injury; arthritis. Novel human 16-JUN-1997; 17-OCT-1997; 14-NOV-2001; 2001US-00990442 Homo 28-APR-2003 ABU59192 standard; protein; sapiens secreted or transmembrane protein PRO361. (first entry) 98US-008759P.
98US-0088021P.
98US-0088022P.
98US-0088023P.
98US-0088023P.
98US-008822P.
98US-0088212P.
98US-0088212P.
98US-0088212P.
98US-0088212P.
98US-0088212P.
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98US-0088212P.
98US-008821P.
98US-008821P.
98US-008821P.
98US-008821P.
98US-008824P.
98US-008824P.
98US-008824P.
98US-008825P.
98US-0089312P.
98US-0089312P.
98US-008933P.
98US-008953P.
98US-008953P.
98US-008953P.
98US-008953P. 97US-0049787P. 97US-0062250P. 97WO-US020069. 98US-0084600P. 98US-0087106P. 98US-0087607P. 98US-0087609P. 98US-0078910P. 98US-0083322P. 97US-0065186P 98US-97US-0066770P 431

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17-JUN-1998;
18-JUN-1998;
18-JUN-1998;
16-SEP-1998;
17-SEP-1998;
07-OCT-1998;
07-OCT-1998;
07-OCT-1999;
08-MAR-1999;
08-MAR-1999;
15-SEP-1999;
15-SEP-1999;
16-DEC-1999;
16-JEB-2000;
16-MAR-2000;
17-MAR-2000;
18-FEB-2000;
19-MAR-2000;
19-MAR-2000;
11-MAR-2000;
11-MA
                                                                                                                                                                                                                                                                                                                                                              Ferrara N
Grimaldi
                                                                                                                                                                                                                                                                                                                                                                                                                                            GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98US-0089653P

98US-0089901P

98US-0089908P

98US-0089908P

98WO-US019330

98WO-US019437

98WO-US019437

98WO-US012550

99WO-US012552

99WO-US0211547

99WO-US028311

99WO-US003465

2000WO-US004914

2000WO-US004914

2000WO-US006814

2000WO-US006814

2000WO-US013356

2000WO-US013777

2000WO-US030952

2001WO-US030952

2001WO-US01786

2001WO-US01786

2001WO-US01786

2001WO-US01786

2001WO-US01787
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Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton Ferrara N, Fong S, Gerber H, Gerritsen ME, Goddard A, Grimaldi JC, Gurney AL, Kljavin IJ, Napier MA, Pan J, Roy MA, Stewart TA, Tumas D, Watanabe CK, Williams PM, PM, Godowski Paoni NF; Wood WI; Į, PJ;

WPI; 2003-247083/24 N-PSDB; ABX80473.

and el isolated PRO polypeptides e.g., PRO826, PRO1068, PRO1184, PRO1346 PRO1375, which stimulate proliferation of stimulated T-lymphocytes therapeutically useful for enhancing immune response and in cancer

Claim 12; Fig 328; 648pp; English.

The invention describes an isolated human PRO polypeptide. The PRO polypeptides are useful in detecting PRO polypeptides in a sample, in linking a bioactive molecule to a cell expressing a PRO polypeptide, and in modulating at least one biological activity of a cell expressing a PRO polypeptide. PRO1312 stimulates hypertrophy of neonatal heart and is thus useful for treating cardiac insufficiency disorders. PRO1154 and PRO536, stimulate adrenal cortical capillary endothelial growth, and PRO536,

Initial Residue Gaps mammals which would be beneficial in inhibiting tumour growth. PR0826, CC PR01068, PR01184, PR01184 and PR01375 stimulate proliferation of ctimulated T-lymphocytes and are therapeutically useful for enhancing cc immune response. PR0828, PR0826, PR01068 or PR01132 enhance survival of retinal neurons cells (PR01132 is also enhances survival/proliferation of crod photoreceptor cells) and therefore are useful for treating retinal cc disorders of injuries, e.g. retinitis pigmentosum, AMD. PR0819, PR0813 and PR011066 induce proliferation of mammalian kidney mesangial cells, and PR011066 induce proliferation of mammalian kidney mesangial cells, and PR011066 induce proliferation such as Berger disease or other ceresed mesangial cell function such as Berger disease or other cephropathies associated with dermatitis, herpetiformis or Crohn's cdisease. PR01310, PR0844, PR01312, PR01192 and PR01387 induce the coroliferation and/or redifferentiation of chondrocytes in culture and are thus useful for treating sports injuries, and arthritis. This is the cc amino acid sequence of a novel human PRO protein EAŚPGSSSQGSVPENQYGLPFEKWLLIGSLLFGVLFLVIGLVLLGRILSESLRRKRYSRLDYLINGIYVDI 370 380 390 400 410 420 X
BASPGSSSQGSVPENQYGLPFEKWLLIGSLLFGVLFLVIGLVLLGRILSESLRRKRYSRLDYLINGIYVDI 80 90 100 110 120 130 140 ISGDKACNIMIFDTRKTJAKOPNCYLFFCENEBACPLKPAKGLMSYRIITDFPSLTRNLJSQELFQEDSLLHG QFSQAVTPLAHHHTDYSKPTDISWRDTLSQKFGSSDHLEKLFKMDEASAQLLAYKEKGHSQSSQFSSDQEIA useful for treating conditions or disorders where angiogenesis would be beneficial, e.g. wound healing and antagonist of this polypeptide are useful for treating cancerous tumours. PROB12 inhibits vascular endothelial growth factor (VEGF) stimulated proliferation of endothelial cells and is thus useful for inhibiting endothelial cell growth in the contraction of endothelial cells and is thus useful for inhibiting endothelial cell growth in the contraction of the co PRO943, Sequence 431 Identity Score Length: and PRO1387 induce c-fos in endothelial cells, and PRO828, 0 0 160 431 ΑA, 100% PRO826, PRO1068 or PRO535, 431 September Optimized Matches Conservative Substitutions 30, 180 Score 2004 11:80 n 190 431 PRO826, PRO819, Type: Significance Mismatches ש Check: are thus a 210 H 0 005 e f ō,

US-09-944-929-83 ABU58364.PEP Novi Nove1 (1-431)secreted

TOIG of: abu58364 human 2687 protein PRO361

check:

from:

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03-DEC-1997
11-DEC-1997
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15-SEP-1999
10-DEC-1999
11-EEB-2000
22-MAY-2000
28-JUL-2000
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21-FEB-2000
22-MAY-2000
21-FEB-2000
                                                                                                                       Baker KP,
Gerritsen I
Hillan KJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               anti-HIV; cytostatic; antidiabetic; BMP-agonist; BMP-Antagonis
cytokine-agonist; cytokine-antagonist; gene-Therapy;
inflammatory disease; organ failure; atherosclerosis; cardiac
infertility; birth defect; premature aging; AIDS; cancer;
New isolated diagnosis and
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                                                            2003-198285/19.
DB; ABX78486.
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                                                                                                                                                                                                      GENENTECH INC
                                                                                                                   , Botstein D,
n ME, Goddard /
J, Kljavin IJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      complication.
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  and
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97US-0069335P

97US-0069425P

97US-006969P

97US-00698702P

97US-00698702P

97US-00698702P

97US-0068017P

98US-00744086P

98US-00744086P

98US-0074992P

98US-0075945P

98US-00112850P

98US-0112850P

98US-0113296

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                       PRO
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PRO polypeptide and encoding treatment of disorders such
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               protein;
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                                                                                                                     Eaton DL, Fo
A, Godowski I
Napier MA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antiarteriosclerotic; cardiant; gynecological;
tidiabetic; BMP-agonist; BMP-Antagonist;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   431
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                                                                                                                     Ferrara N, Filvaroff
i PJ, Grimaldi JC, Gu
, Roy MA, Tumas D, V
nucleic acids, useful for as inflammatory disease.
                                                                                                                       Gurney AL;
Wood WI;
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Residue
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                                                                      40 50 60 70

MPFGGEGSLTYTLVIICFLTLRLSASQNCLKKSLEDVVIDIQSSLSKGIRGNEPVYTSTQEDCINSCCSTKN

MPFGGEGSLTYTLVIICFLTLRLSASQNCLKKSLEDVVIDIQSSLSKGIRGNEPVYTSTQEDCINSCCSTKN

MPFGGEGSLTYTLVIICFLTLRLSASQNCLKKSLEDVVIDIQSSLSKGIRGNEPVYTSTQEDCTNGCCCTTC

X 10
                                                                                                                                                 80 90 100 110 120 130 140 150DKACNIMIPDTRKTARQPNCYLFFCPNEBACPLKPAKGLMSYRIITDFPSLTRNLPSQBLPQEDSLLHG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention describes a novel isolated PRO polypeptide. The methods ecompositions of the present invention are useful for the diagnosis and treatment of disorders such as inflamentory disease, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, AIDS, cancer, diabetic complications and mutations in general. This is the amino acid sequence of a novel human secreted PRO protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              atherosclerosis, cardiac injury, infertility, AIDS, complications.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Identity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score
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100%
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Matches = 431
Conservative Substitutions
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. US-09-944-929-83 (1-431) ABU55934.PEP Human secreted/transmembrane protein

TOIG of: abu55934

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ABU55934 standard; protein; 431 AA.

XX ABU55934;
XX AC ABU55934;
XX 26-MAR-20
XX 26-MAR-20
XX Human sec:
XX Human; PR
KW Cytostati
KW cardiant;

C 26-MAR-2003 (first entry)

DE Human secreted/transmembrane protein PRO361.

Human; PRO; secreted protein; transmembrane protein; anti-HIV; cytostatic; antiarteriosclerotic; antiinflammatory; antidiabetic; cardiant; AIDS; acquired immunodeficiency syndrome; cancer;

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The invention relates to an isolated PRO polypeptide (a secreted or CC transmembrane protein) comprising: (a) at least 80% sequence identity or CC positives when compared to anny of 15 sequences, fully defined in the CC specification, lacking or with its associated signal peptide; or (b) at least 80% sequence identity to a sequence encoded by the full-length CC coding sequence of a DNA deposited in the American Type Culture CC collection (ATCC). Also included are: (1) an isolated nucleic acid CC comprising: (a) at least 80% sequence identity to a nucleotide sequence that encodes a PRO protein; (b) at least 80% sequence with any of 15 fully CC (c) at least 80% sequence of a full-length coding sequence of a cC (c) at least 80% sequence identity to a full-length coding sequence of a cC (c) at least 80% sequence identity to a full-length coding sequence of a cC (c) at least 80% sequence identity to a full-length coding sequence of a cC (c) at least 80% sequence comprising No. 209528, 209528, 209528, 209529, 209528, 209528, 209529, 209528, 209528, 209529, 209528, 209528, 209529, 209528, 209529, 209528, 209529, 209528, 209529, 209528, 209529, 209528, 209529, 209528, 209529, 209528, 209529, 209529, 209528, 209529, 209528, 209529, 209528, 209529, 209528, 209529, 209529, 209528, 209529, 209529, 209528, 209529, 209529, 209528, 209529, 209529, 209528, 209529, 209529, 209529, 209528, 209529, 209529, 209529, 209528, 209529, 209529, 209528, 209529, 209529, 209528, 209529, 209529, 209529, 209528, 209529, 209528, 209529, 209529, 209528, 209529, 209528, 209529, 209528, 209529, 209528, 209529, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209528, 209
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01-DEC-1999;
16-DEC-1999;
11-FEB-2000;
22-FEB-2000;
02-MAR-2000;
30-MAR-2000;
22-MAY-2000;
28-JUL-2000;
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01-DEC-1998;
22-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New isolated PRO polypeptide and encoding nucleic acid, useful for the diagnosis and treatment of disorders associated with the PRO polypeptide, such as AIDS, cancer, atherosclerosis, inflammatory disease and diabetes.
                                        biological assays.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 12; Fig 32; 178pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-174141/17.
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Hillan KJ, Kljavin
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ME, Goddard A,
Kljavin IJ, N
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99WO-US028313

99WO-US028409

99WO-US028301

99WO-US038095

2000WO-US004514

2000WO-US004541

2000WO-US004841

2000WO-US004841

2000WO-US004841

2000WO-US005841

2000WO-US014042

2000WO-US020710

2000WO-US020710

2000WO-US020718
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                                        The
                                      be used in the different screening, the present sequence represents a PRO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eaton DL, Ferrara N, Filvaroff E;
A, Godowski PJ, Grimaldi JC, Gurney
Napier MA, Roy MA, Tumas D, Wood W
                                      protein
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ABU55934

Length: 431

September 30,

2004 08:11

Type: ש Sequence

431 AA;

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Initial
Residue
Gaps
    TOIG of: aab34739
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AAB34739.PEP Human secre
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OFSQAVTPLAHHHTDYSKPTDISWRDTLSQKFGSSDHLEKLFKMDEASAQLLAYKEKGHSQSSQFSSDQEIA
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                                            17-MAR-1999;
17-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       systemic lugus erythematosus; rheumatoid arthritis; anaemia; stroke; haematopoiesis regulation; tissue regrowth; wound healing; haemophilia; Alzheimer's disease; Parkinson's disease; Shy-drager syndrome; cancer; contraceptive; infection; growth inhibition; hyperproliferative disorder psoriasia
                                                                                                                                                                                           17-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                  WO200055375-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human
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                                                                                     ISGDKACNLMIFDTRKTARQPNCYLFFCPNEEACPLKPAKGLMSYRIITDFPSLTRNLPSQELPQEDSLLHG
QFSQAVTPLAHHHTDYSKPTDISWRDTLSQKFGSSDHLEKLFKMDEASAQLLAYKEKGHSQSSQFSSDQEIA
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15-FEB-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 431 AA;
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